276

REPORT OF THE COMMISSION

APPOINTED TO

Inquire into Matters Connected

WITH THE

764

PUBLIC BUILDINGS

AT OTTAWA.

BIBLIOTHEQUE
S.M.E.
1964
Séminaire de Québec

PRINTED BY ORDER OF THE EXECUTIVE COUNCIL.

BIBLIO
S.M.E.
QUEBEC

Bibliothèque,
Le Séminaire de Québec,
3, rue de l'Université,
Québec 4, QUE.

QUEBEC:
JOSIAH BLACKBURN, FABRIQUE STREET.
1863.

Comm
Accou
Agree
"
Amou
"
Archi
Archi
Assem
Ashla

Boiler

Bowes

Brick

Comm

Commi

CONTENTS.

	Pages.
Commission	5
Accounts	32, 33, 34
Agreement not to apply schedule of prices to extra work	14
" Clandestine	16
Amount of work to be done Parliamentary Buildings	49
" " Departmental Buildings	49
Architects. Parliamentary Buildings	11, 23, 24, 25, 53, 54, 55
Architects Departmental Buildings	11, 23, 24, 25, 53, 54, 55
Assembly Legislative Chamber, for	10
Ashlar Works, fine	"
Pickfaced	31
Boiler Houses, what they are	27
Excavations	27, 31
Size of	25, 27, 28
Item of great moment	31
No written order for	"
Garth said to have ordered Aslar work	"
Denies it	"
Rubble masonry sufficient	"
Ashlar work in useless	
Bowes, J., Comes	32
His measurements	"
Instructions from Hon. Mr. Cauchon	"
do from Hon. Mr. Killaly	35, 39
In connection with Mr. Gundry	44
Brick work bad	48
Commission, this, opened	9
Commissioner Public Works, respecting prices for extra work	28, 29
Hon M. Mr. Rose, note of approving prices for extra work	29
Hon. Mr. Cauchon, letter to Bowes	32
Succeeds Hon. Mr. Rose	33
Expends all the money	34
Sends Hon. Mr. Killaly	"
Correspondence with	34, 35
Stoppage of work	35
Commissioner, Deputy of Public Works :	
Duty of to test cost of designs	12
To examine sites	"
Depth of rock	"
Test pits	"
His want of consideration of plan and levels	13
In placing buildings	"

	Pages.
Commissioner, Deputy of Public Works,—*Continued*	
Saw works in progress and sanctioned	51
Instructs Law Officers as to Contracts	15
Again instructs do do	"
Gives Schedules of prices to attach to Contracts	16
Should not have allowed plans for Tenders to go without incorporating plans for heating and ventilating. Reasons for not doing	23, 24
Contracts:	
Draft of by Department	15
" by Law Officers	"
Instructions to Law Officers	"
What they did not contain	16
True Copy of heading not given	"
Contracts executed	"
How it is alleged they were drawn	17
Construction of	"
Usual clause struck out	"
Clause about heating and ventilation not enforced	"
Garth's Contract, what	"
Referred to, with departure from in respect to prices.	48
Written and Parole	"
Correspondence McGreevy, about Nepean facing	23
Between Architects and Departments	26, 29
Hon. Mr. Cauchon to Mr. Bowes	32 35
" Killaly	34 35
McGreevy	44
Jones, Haycock & Co	45
Council Legislative Chamber, for	10
Size of	"
Where situated	"
Departmental Buildings, where situated	10
Size of	10
What they were to	10
Material	11
Cost of	"
Accommodation	"
Omissions in	"
Style of	48
Work on good	"
" done	49
Department of Public Works:	
What appears by in reference to Contract	16
Ought to have fully carried out scheme of do	"
Designs, comparison of	11
Style of	49
Adopted on conditions	11
What climate required	48

	Pages.
Designs, comparison of—*Continued*	
Probable want of light	50
Competition designs had provided for heating and ventilation	18
Description of by Architects	17, 18, 19
Drains, increased depth of	26
Ducts and Drains, Parliament Building	27
Departmental Buildings	27
Rubble masonry would have been sufficient in	31
unartificial mode of making one over the other	"
All the space between walls of	"
Made solid masonry unnecessarily	"
Utility of ducts outside doubtful	"
Were not required till building advanced	"
Main one from east Departmental Building	"
Error of Mr. Killaly ia measuring	42
Estimates progressive.	
Estimates of Hon. Mr. Killaly :	
Mr. Stent's explanation of	40, 41
Mr. Fuller's do	41, 42
Mistakes suggested in	42, 43
Measurement of ducts and drains	42, 43
Nepean facing	42
Bed and joint brick work	42
Scaffolding	43
Estimates of Commissioners, how prepared	46
What columns in show	47
Prices on those settled by Architects and Department	47
Excavations—enormous	26
Commissioner approves on Departmental Building	28
Contractors allowed advances on stone as if material delivered	30
Used for Pickfaced masonry	"
Extra prices, how sanctioned	28, 29, 30
Correspondence about	28, 29, 30
Mr. Killaly's	37, 38, 39, 40
Allowed by and in Progress Estimates	37, 38, 39, 40
Expenditure—alarming in 1860	32
Fire proofing	15
Fuller, Mr., evidence of	19
Explanation of Mr. Killaly's prices	41
Foundations—enormous excavations in	13
What should not have been excavated	13
Erroneous, thick	24, 25
Useless	24, 25
Who caused them	25
Morris	11, 20, 28
Grist	24, 28

	Pages.
Garth, Chas.—Tender accepted	19
System	21
Refused advances	22
What his Contract was	"
Denies he ordered work in Boiler Houses and ducts	31
Blame unjustly thrown on him	"
Gundry, Thomas	44
Head, Sir Edmund, selected sites	9
His memorandum of for consideration	11
Heating and ventilating, separate branch	19
Architects acquainted with	"
Notices for Tenders for	"
Competitors for	"
Order in Council giving it to Mr. Garth	"
What was excepted in his Tender	"
Enormous outlay in	"
Description of coil system	20
Common and vault	"
How system applied	"
Boiler, where placed	"
Operation of Steam	"
Pumping return water	"
Not necessary when Boilers low	"
Vaults for	"
Ducts	"
Coils heated, how	21
Registers	"
Special adaptation to	"
Legislative Chambers	"
Ventilating shaft what	"
Downward ventilation	"
Flues to carry off bad air	"
Effect of cold weather on coils	"
Long ducts, supposed use of	"
Fans	"
Economy compared with expense	"
What cost so much	"
Reasons of Deputy Commissioner for not incorporating plans of in Contract plans	22
Hardpan	26
Harper	44
Hutchison, W	"
Killaly, Hon. H. H., opinion of an omission of clause in Contract about suspension of work	17
Is sent by Hon. Mr. Cauchon	34
Instructiens to	34, 35

	Pages.
Killaly, Hon. H. H.—*Continued.*	
What he informs Department	35
Department do not reply	"
Suggestions respecting	"
Damages for stopping of work	36
Justifies his mode of measurement	"
Arrangement with Contractors	"
Mode of measurement makes comparisons difficult	"
His decision as to principles of	40
Measurements, beds, joints, &c	"
Bricks	"
Cut stone	"
Rates and prices set upon work	37, 38, 39, 40
How rates arrived at	40
Mr. Stent's explanation of	"
Nepean stone	42
Mistakes and errors suggested	42, 43
Keefer, Mr., duty to test cost of designs	12
Report upon do examines sites	"
Writes "informal" against McGreevy's tender	14
Reference to practical head of Department	22
Reasons for not incorporating plans for heating and ventilating with contract plans	"
Makes enquiries for other stone	"
Recommends Nepean	23
Allows Garth to put his Boiler 10 feet lower	27
Makes note that prices of Architects too high	28
Suggestions concerning prices for Progress Estimates	29
Approves of prices for Progress Estimates	30
Memorandum on first Progress Estimates, showing extra work	"
Correspondence points to agreement spoken of by him	"
Hon. Mr. Cauchon never consults him	33
Larose, Mr. :	
Levels of sites of buildings	10
Plan of	"
Library, where	"
Size of	"
Logau, Sir Wm., letter of	23
His opinion about stone	"
Letters to Architects to adopt designs	13
Modifications required	"
Leveque	44
Materials—enquired about limestone and Nepean	23
Nepean substituted for limestone	"
Durability of Nepean, Ohio, Potsdam stone	"
Measurements—modes of measuring stone, of Toise	30
Custom in Ottawa	"

	PAGES.
Measurements—*Continued.*	
Hon. Mr. Killaly's principles	40
What extra? what additional?	"
New ones ordered by Commission	44
Who appointed and associated?	"
Available for future use	46
Mismanagement—Allowing work to be begun and proceeded with, without order, estimate, or contract	22
Bowes—Mr. Cauchon to him	32, 35
Money—On hand on resignation of Mr. Rose	33
Subsequent appropriations	"
Hon. Mr. Cauchon expends it all	"
Morris, John—Instructions to, sent for	11
Asked to inquire about materials	22
Nepean Facing Sandstone—substituted for limestone, cost of	23
McGreevy agrees, Jones & Co., acquiesces	"
How measured at first	32
Explanations of substitution, how it ought to have been measured—allowances for	"
How measured by Hon. Mr. Killaly	37
Error in	42
Notice—To Architects for designs	11
What they were to be	"
What selected	12
To Contractors for Tenders	13
To Contractors of new measurement	44, 45
Their replies	"
To submit claims for damages	51, 52
Replies	"
Orders in Council—Awarding permission for designs	12
Recommending to adopt their designs	"
McGreevy—the Contract	14, 15
Fireproofing	"
Sanctioning Departmental Buildings to Jones, Haycock & Co	"
Nepean facing	23
Appropriating $200,000	33
Page, John—sent	32
Report referred to	"
Agreement about prices	"
Pattison, J. H.	44
Parliamentary Building—where erected—front of	10
Wings of	"
Legislative Chambers in	"
What they were originally to comprise	"
Materials	"
Cost of	"
Accommodation	"
Style of	46
Works on—good—except brick	"

	Pages.
Parliamentary Buildings.—Continued.	
Caused by Larose	48
Work to be done on	"
Style of construction	"
Pelham, Mr.	44
Pickfaced masonry—made from stone excavated	31
Cost of allowance for	"
Progress Estimates—Note of Mr. Keefer not to apply schedule prices to	29
And they were not—memorandum of Mr. Rubidge	"
Paid for till August, 1861, inclusive	33
Prices is referred to by Hon. Mr. Killaly	38, 39, 40
His prices and former ones not easily compared	40
Premium for Designs—Order in Council for	11
Plans—Made an assumed ground line	13
Agreed to by Deputy Commissioner	"
Where to be seen	"
For Tenders no time for putting in heating and ventilation	23
Adaptation to climate doubtful	50
Quoins—Error in specification about Departmental Buildings	43
Allowance for improperly allowed in Parliament Building	44
Rock Excavations—enormous	26, 27
Rubidge, Mr.. Report of	12
Memorandum of on Progress Estimates	30
Schedules of prices—No mention of in Tender	14
What they are and how used	"
McGreevy to put in one	"
His schedule	"
Rejected	"
Refused to put in another	"
Agreement not to apply	"
Architects and Mr. Morris to make statements	15
How made	"
Departed from—how prices made and sanctioned	28, 29, 30
Note of Mr. Keefer and Mr. Rubidge	" " "
Prices by Hon. Mr. Killaly	38, 39, 40
Difficulty of dealing with	47, 48
Reasons for not applying them	48
Schedules of Commissioners :	
Sites of Buildings—selected when	9
By Sir Edmund Head	"
Described	16
Height of	"
Sewers—Depth of increased	27
Strength of—Main one for Eastern Departmental Building	30
No good reasons for increased length	"
Stent, Mr.—Evidence of on heating and ventilating	19
Explanations of Mr. Killaly's prices allowed by him	40, 41

	Pages.
Stone—Durability of Limestone, Nepean, Potsdam, Ohio	23
Nepean substituted for limestone	"
Cost of	"
McGreevy agrees	"
Jones, Haycock & Co. acquiesce	"
Contractors allowed advances on	"
Stone from excavation	30
Contractors allowed advances to use without charge	"
Supervision bad	48
Suspension of Works	35
Tenders volunteer	13
Form of	14
McGreevy's	"
Opened with others	"
Seven selected	"
Peters	"
Commissioners Report upon	"
Order in Council on	"
Toise—What it is	30
Of stone—masonry	"
Different modes of applying it	"
Rubble masonry, Toise of 54 feet	"
Water in excavations allowed for	27
Walls too thick	25
Useless, wrong	"
Superfluous	"
Out of place	"
Corbelled over	"
Witnesses examined, commenced 4th August	9
Works good except brick	48
Why brick bad in	"
Contractors not to blame for extra and additional but for superfluous and useless	48
Creditable to Contractors	49
Suspension of	35
Works extra and additional, prices for	28
Note of Mr. Keefer on	"
Correspondence about	"
Sanctioned by Architects	48, 49, 50-1-2-3-4
Covered in winter, December 1st	28, 29, 30
How carried on in 1861	33
Money sufficient for	"
Stoppage of	34
What enabled Contractors to go on	36
Hon. Mr. Killaly's arrangement about	37
Works, His principles of measurement	"
What extra—what additional	"
Rates and prices set on by Mr. Killaly	38, 39, 40
Rates in Progress Estimates	28, 29, 30
Column for in Estimate of Commission	47

	Pages.
Works.—Continued.	
Terms applied to—not correct	47
Difficulty of dealing about prices for	48
Reasons for not applying contract prices to extra and additional work	49
Works yet to be done—Parliament Buildings	"
Departmental Buildings	50

INDEX TO SCHEDULES ATTACHED TO REPORT.

		Pages.
Schedule A.—Parliament Buildings.		
	Summary of measurement of work done	60
" "	Measurement of work done, &c	61
" *a.*	Account of work done and material supplied by Thomas McGreevy	63
" B.—Departmental Buildings.—Eastern Block.		
	Summary of work done	66
" "	Measurement of work done to Eastern block	67
" *b*	Account of work done, &c	69
" C.—Departmental Buildings.—Western Block.		
	Measurement of Work done from first floor line upwards	71
	Measurement of work done to Departmental Buildings	73
" *c*	Summmary of work done	75
	Account of Work done	75
" D.—Parliament Buildings.		
	Details of work required for completion	76
" *d.*	Summary of estimate	98
" E.—Departmental Buildings.—Eastern Block.		
	Summary of Contract works and works required to finish	99
	Details of work required for completion	100
" F.—Departmental Buildings.—Western Block.		
	Details of contract work and works required to finish	112
	Summary of " " " "	122
" G.—Parliament Buildings.		
	Summary of measurement of work prepared	123
	Measurement of work prepared on ground	124
" H.	Materials delivered for Parliament Buildings	136
	Materials at Brick Yard	138
" I	Particulars of valuation of sheds and plant	139
" *i.*	Plant in Brickyard, west side of canal	145
	" " east " "	146
" K.—Departmental Buildings,—Eastern Block.		
	Summary of work prepared and material delivered at the Eastern block	148
	Measurement of works prepared and of materials delivered	149
Schedule L.—Departmental Buildings—Western Block.		
	Summary of work prepared and materials delivered	148
	Measurement of work prepared and materials delivered	151

PAGES.

" M.—DEPARTMENTAL BUILDINGS.

Measurement of plant at eastern block 153
Measurement of plant in brickyard 154
Measurement of plant in western block 160
" " in brickyard 164
" N. List of certificates issued on account of Public Buildings 166
" O. Estimate of external work 174
DEPARTMENTAL BUILDINGS.—General summary 174
DEPARTMENTAL BUILDINGS,—General Summary 175

INDEX TO APPENDIX.

	PAGES. *Examined.*	PAGES. *Recalled.*
Evidence of John Morris	1—16 inclusive,	64—68 inclusive.
" Thomas Fuller	16—31 "	
" Thomas Stent	31—46 "	57, 58 "
" John Grist	46—50 "	
" Alexander Mackenzie	51—57 "	
" Thomas Stewart	58—60 "	
" Charles Garth	60—64 "	
" Joseph Larose	68—73 "	132
" Jean Baptiste Tison	73	
" Wm. Haughy	74—76 inclusive.	
" Samuel Keefer	77—89 "	99—105, 125—128
" William Coverdale	89,90 "	
" James Baine	91,92	
" James Dyson Slater	92,93	
" Patrick McMahon Burns	93,94	
" Hewitt Bernard	94,95	
" John Rose	95,96	
" Frederick Preston Rubidge	96—99 inclusive.	
" William Hutchison	105—109 "	132,133
" George Brown Pelham	110—112 "	135
" Toussaint Trudeau	113,114	
" Thomas McGreevy	114	
" John Henry Pattison	114—117, inclusive,	124, 134
" Hon. Joseph Cauchon	117—119 "	
" John Bowes	119—122 "	131,132
" Thomas Murray	122	
" John Rowat	123	
" John Page	123	128
" Thomas Gundry	129,130	
" Adolphe Leveque	133,134	
" John Harper	134,135	

EXHIBITS, from page 136 to 227 inclusive, referred to in the evidence.

PAGES.

..... 153
..... 154
..... 160
..... 164
..... 166
..... 174
..... 174
..... 175

PAGES.
Recalled.
64—68 inclusive.
57, 58 "
132
—105, 125—128
132,133
135
124, 134
131,132
128

PROVINCE OF CANADA.

MONCK.

[L. S.]

VICTORIA, *by the Grace of God, of the United Kingdom of Great Britain and Ireland,* QUEEN, *Defender of the Faith, &c., &c., &c.*

To JOHN WILSON, of the City of London, in the County of Middlesex, in Our Province of Canada, Esquire, one of Our Counsel, learned in the Law; VICTOR BOURJEAU, of the City of Montreal, Esquire, Architect and Builder; JOSEPH SHEARD, of the City of Toronto, Esquire, Architect and Builder; and to JOSEPH STARK, of the Town of Sorel, Civil Engineer, Secretary of this Our Royal Commission—GREETING:

JOHN S. MACDONALD, *Atty.-Genl.*

WHEREAS Contracts have been heretofore entered into with Us by divers persons for the erection of Buildings at the City of Ottawa, for the use, occupation and accommodation of the Legislature and of the several Public Departments of Her Majesty's Civil and Militia Service of Canada, and the same have been thereunto commenced, and are yet incomplete and unfinished; AND WHEREAS the sum of money originally voted by the Legislature of Our Province of Canada, for the purposes of erecting such several Public Buildings has been largely exceeded, and there is reason to believe that extensive and unauthorised departures from the Contracts and the terms thereof have occurred; AND WHEREAS it is desirable that full and impartial enquiry and investigation should be made into all matters connected with the designs for the said Buildings and the Contracts for the erection thereof and the performance of the same, and of all expenditure, outlay and disbursements in any manner in connection therewith. NOW KNOW YE, that reposing especial trust and confidence in your loyalty, ability and integrity, We, of Our special grace, certain knowledge and mere motion, and of Our Royal Will and Pleasure, Do, by these presents, nominate and appoint you, the said JOHN WILSON, VICTOR BOURJEAU and JOSEPH SHEARD, to be Our COMMISSIONERS for the following purposes: To enquire fully into the system of management under which the said Public Buildings have been conducted from the time the designs for them were first invited by public competition up to the present date, especially whether the plans adopted are of the style of architecture best adapted to the climate of this country, and are of the class and character of workmanship called for by the Advertisement inviting competitors. If any and what Estimates for said buildings were submitted to the Department of Public Works, and if so by whom and what action was taken in regard to them; whether any alterations were made in the plans after they were received and before they were exhibited to Contractors as a guide for "Tendering," and if so, what those alterations were? Whether provision was made for heating, ventilation, drainage, water and gas supply, and if such works were embraced in the Estimates, and to what extent provision was made for works of this class; whether any and what examination was made in regard to the sites of the respective buildings, in order to ascertain the nature and character of the foundation before the building contracts were given out, and whether it is common or usual to do so for large buildings.

And also, to enquire into the manner and way in which "Tenders" for the Works were received, and if the plans and specifications supplied sufficient information on which parties could reasonably base their "Tenders?" Whether it is usual for a Schedule of rates for "extra" and additional works to be appended to "Tenders" and Contracts for such a class of works, and if so whether it was done in respect to the works in question? Whether it is usual to adhere to such a Schedule when so appended to contracts, and whether it has been adhered to in making payments to the contractors for the works in question, and if not, the reasons and authority under which a departure from the Schedule rates has been made?

Also, to enquire into and ascertain what methods were taken to test the durability and fitness of the stone to be used in the construction of the buildings, previous to the commencement of the same; whether such tests were sufficient to establish the quality of such stone, and if any substitution of other building stone subsequently took place, upon what ground such substitution was made, and what additional cost to the Province, if any, resulted from the substitution of one description of building stone for another in the progress of the works?

And also, Whether the system of heating and ventilation subsequently adopted was absolutely necessary or desirable for either or all of the three blocks of buildings? Whether, in view of the limited appropriation by Parliament, the Department of Public Works was warranted in recommending or adopting such a system? Whether it was known that the carrying out of the system would be attended with so much outlay as the Progress Estimates show, and whether such information was communicated, and if not why not to the Government, or to the Commissioner of Public Works? On whose recommendation was the the system of heating and ventilation adopted? Who made the Estimate for it, and if no Estimate was made, whose duty was it to have furnished such Estimate? And also, to enquire into the manner in which the system of heating and ventilation has been carried out, and under whose direction, if under the Architects of the respective buildings? then to ascertain their authority, and whether the works were examined and how often by an officer from the Department of Public Works, and the name of that officer, and whether he approved of the works in progress or otherwise, and whether the carrying out of the system adopted necessarily entailed so much expenditure as the progress Estimates show, and if the same system could have been carried out at less expense?

And also, to enquire whether the adoption of the system of heating and ventilation rendered necessary any other works, and if so the nature of such works, and whether they are of a character and extent that the appropriation for the buildings would warrant, and under what special or other authority each or all of such additional or extra works were undertaken, proceeded with and carried out?

And also, to enquire into the various progress and other Estimates that have been made and submitted, and the payments made on them or otherwise to the Contractors, as well as into all other expenditure that has been incurred directly or indirectly connected with the said buildings, by or under the Department of Public Works?

And, in case you find that a departure from the Schedule of rates appended to the Contracts is warranted by the evidence brought before you from the official letters or documents in the Department of Public Works, then you, the said Commissioners will, after fully determining what is contract, and what is "extra" or additional work, procure the whole of the work done to be measured correctly, according to the mode of measurement generally adopted in the locality where the buildings are situated, or at all events after such a mode as is generally recognized in this Province, and capable of being readily understood, and at rates applicable to such mode of measurement as you the said Commissioners may determine upon. Contract Work to embrace all classes of work included in the bulk sum of the Contract, and to be reckoned in the computation at its relative value to the contract sum. "Extra Work" to embrace all the work done to make good deficiencies in the plans and to be measured as heretofore mentioned, and the different classes of work to be allowed and paid for at fair current rates adapted to the mode of measurement. "Additional Work" to embrace all work on foundations below contract lines. Work connected with heating, ventilation and sewerage (not covered by contract) to be measured as before stated, and the different classes of such work to be allowed and paid for

at like fair current rates, according to the mode of measurement to be adopted. And in case your enquiries should lead you to the conclusion that the contract sum for the respective buildings has been or might be remunerative or otherwise to the Contractors, you will take the same into consideration, and the amount of damages, if any, they may have sustained or may sustain from the works of said contract having been suspended, after they have been paid for all work and materials provided at their relative value to the said contract sum.

And you will consider whether the said Contractors are entitled to remuneration, and if so to what amount by way of damages for any "Extra" or additional works which may have been suspended after they have been paid for all such work done and materials provided at fair current rates. In both these cases you will state your reasons for the conclusions arrived at.

And also, to enquire into the amount of expenditure that will be required to finish and complete the three different blocks of buildings according to the designs or plans on which they have been so far carried on; and whether it is judicious and for the public interests that the works should be proceeded with under the present contracts and system, or that the present Contractors should be settled with and the unfinished portions of the works relet.

And also, to enquire into the nature of the agreement made between the respective Architects and the Department of Public Works, and the degree of responsibility attaching to the said Architects in regard to the progress or other Estimates made and signed by them in connection with the works, taking into consideration the respective contracts and the Architects instructions from the Department of Public Works; and whether from the evidence and the documents that may be submitted to you it would be judicious, or for the public interests longer to continue the said Architects in their present position or otherwise, and the course you would recommend in regard to the future arrangement of the works.

And also, to enquire into the degree of responsibility directly attributable to the Government, the official head and professional adviser of the Department of Public Works, the Architects of the respective buildings and other officers as well as of the Contractors in regard to the carrying out of said Contract Works, system of heating and ventilation, sewerage and all other works, "Extra" or additional of the contracts.

And also, to enquire as to whether the mode of management under which the designs were received and approved of, the awarding of the Contracts, and how the works were proceeded with have been of a nature such as was calculated to lead or has led to the economical construction of the buildings, and if it is for the public interest that the same system should be further continued in regard to the buildings in question.

And generally to enquire into, ascertain and report fully upon all and every the matter connected with the Tenders and Contracts for and the construction of the several works connected with the buildings, and every matter and thing appertaining thereto in so far as the same have been commenced and proceeded with or may hereafter require to be prosecuted to completion.

To have and To hold the said office of Commissioners as aforesaid, unto you and each of you, during Our Royal Pleasure. And we do further nominate and appoint you, the said John Wilson, to be Chairman, and you the said David Stark, Secretary of and to the said Commissioners. And it is Our further will and pleasure, and We do, in pursuance of the Statute in that behalf confer upon you and each of you the said Commissioners the power of summoning before you any party or witnesses, and of requiring them to give evidence on oath, orally, or in writing (or on solemn affirmation if they be parties entitled to affirm in civil matters,) and to produce such matters and things as you the said Commissioners deem requisite to the full investigation of the matters into which you are appointed to examine; And We do hereby enjoin and require that a majority of you, the said Commissioners, shall be held to be and be a quorum for the transaction of business, and for carrying out the purposes of this Our Royal Commission; Of all which Our loving subjects and all others whom these Presents may concern are hereby required to take notice and govern themselves accordingly.

IN TESTIMONY WHEREOF, We have caused these Our Letters to be made Patent, and the Great Seal of Our said Province to be hereunto affixed; WITNESS Our Right Trusty and Well-Beloved Cousin the Right Honorable CHARLES STANLEY, VISCOUNT MONCK, Baron Monck of Ballytrammon in the County of Wexford, Governor General of British North America, and Captain General and Governor in Chief in and over Our Provinces of Canada, Nova Scotia, New Brunswick and the Island of Prince Edward, and Vice Admiral of the same, &c., &c., &c. At Quebec, this Twenty-first day of June, in the year of Our Lord, one thousand eight hundred and sixty-two, and in the twenty-sixth year of Our Reign.

By Command,

A. A. DORION, Secretary.

The execution of the within Commission appears by the Report annexed.

JOHN WILSON, *Chairman.*
JOSEPH SHEARD,
VICTOR BOURGEAU.
DAVID STARK, *Secretary.*

Ottawa, 29th January, 1863.

COMMISSION

Appointing Commissioners to enquire into matters relating to the Public Buildings at Ottawa.

Recorded, 26th June, 1862. *Lib. H. A., Fol.* 221.

WM. KENT, *Deputy Provincial Regr.*

KEY TO FOOT NOTES IN REPORT.

Ba., Baine; Bu., Burns; Ber., Bernard; Bo., Bowes.——Co., Coverdale; C., Cauchon; Cn., Contract.——F., Fuller.——G., Grist; Ga., Garth.——H., Haughy; Hu., Hutchison.——K., Keefer.——L., Larose.——M., Murray; Mo., Morris; McK., McKenzie; McG., McGreevy.——Pt., Pattison; Pl., Pelham; Pn., Plan.; P. E., Progress Estimates; P., Page.——Ro., Rowat; R., Hon. J. Rose; Ru., Rubidge.——Sl., Slater; St., Stent; Ste., Stewart; Sp., Specification.——T., Tison; Tr., Trudeau.

☞ It having been found that reducing the plans made mention of in the report and evidence, to the size necessary to embody them with these documents, would unfit them for imparting the information intended; reference is requested to the originals, placed on view in the Railroad Committee Room of the House of Assembly.

REPORT OF THE COMMISSION

APPOINTED TO INQUIRE INTO MATTERS CONNECTED WITH THE

PUBLIC BUILDINGS

AT OTTAWA.

The undersigned, who were appointed by Her Majesty's Commission under the Great Seal of the Province of Canada, bearing date the 21st day of June, A.D. 1862, to inquire into matters connected with the Public Buildings at the City of Ottawa, opened their Commission there on the 1st day of July last; examined the buildings, ordered the measurements of them, and made the necessary arrangements for carrying out the objects of the Commission, until the 4th day of August, when they proceeded to take the testimony upon oath of the several witnesses summoned before them; continuing the same from day to day, till the 19th day of September, when, the measurements of the buildings not being completed, they directed them to be proceeded with, and adjourned the Commission until further notice. Upon notice, the Commission again met at Ottawa on the 18th day of December, 1862, when it was reported that although the measurements had been completed about the 15th day of October, the calculations for the quantities of work had not been made up. Thereupon the Commissioners proceeded to hear what further evidence was to be heard, and now, at the date hereof, the quantities of work having been duly ascertained and the matter fully enquired into and understood, they respectfully beg leave to report to His Excellency the Governor General:—

1st July, opened commission.

Examined buildings.

Commenced to take evidence on 4th August continued till the 19th Sept.,

Heard further evidence.

That the site selected by His Excellency Sir Edmund Head, in the end of May, 1859, for the public buildings at Ottawa, was Barrack Hill,* one of the points of land formed by the indentations of the Ottawa River, containing about 28 acres.† The easterly, northerly, and westerly parts of the boundary are steep and rocky, from its intersection with Wellington Street, on the east, round to within a short distance of the same street on the west. The extreme easterly part is one side of the ravine, containing the first eight locks of the Rideau Canal, the remaining portion, round to Bank Street, is the precipitous underwooded bank of the Ottawa River. The south-western and southern boundaries are Bank Street and Wellington Street, which are lower than the ground on which the buildings stand. The land is highest at its most northerly point, from which it slopes gradually southerly towards Wellington Street.

Description of site.

Boundaries of site.

* K

† Sl.

Height of site from River Ottawa.

Taking as a base, the supposed low water mark of the Ottawa River, an assumed point, about 6 feet above the entrance locksill of the Rideau Canal, the height of the northerly portion of the ground is 160 feet, its mean height on Wellington Street 133 feet.* On the southern line of the Departmental Buildings the ground is seven feet lower at the eastern than at the western building. The Parliament Building has been erected on the northern portion of this land, and has a southern façade of 473 feet, it is flanked by two wings, each having towers, and there is a tower at the grand entrance in the centre, 44 feet by 30 feet at the base, fronting Wellington Street, at a distance of 600 feet from it.†

Description of Parliamentary Building.

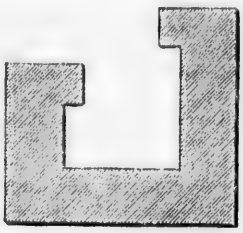
Situation of Legislative Chambers.

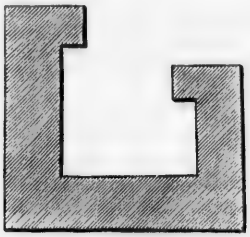
The Legislative Chambers have not been placed in the front of the building, but in the northern and rear portions of it. They are each 82 by 45 feet inside, with vaulted roofs 44 feet high from the floor to the spring of the roof, and 53 feet from the floor to the ceilings, which are to be ornamented and pannelled with glass, through which the chambers will be lighted from skylights in the roofs. The Legislative Council Chamber is on the right, the Legislative Assembly on the left of the grand entrance Hall. On the northerly part of the ground the Library has been placed, a sixteen sided building externally, but circular inside, having a diameter of 90 feet in the clear, and joined to that portion of the Parliamentary Building which contains the Legislative Chambers.‡

Library, description of.

Departmental Buildings, description of.

The Departmental Buildings are distant from Wellington Street about 92 feet, and are formed thus :





The eastern one has a frontage on this street of 253 feet, and a frontage on the quadrangle of 318 feet. The western one has a frontage on the same street of 277 feet, and on the quadrangle of 211 feet ; they are distant from each other 700 feet. A road of 100 feet in width is to be made in front of all the buildings, so that, exclusive of the roads, there will be a quadrangle of 500 feet in front of them. § The precise form of the ground, and its levels at every 50 feet, were marked on a plan, made from a survey by Mr. Slater, between the 21st May and the 6th June, 1859, and returned, when completed, to the Department of Public Works, of which no use was made when the plans for exhibition to tenderers were in course of preparation.‖

Plan of grounds and levels by Mr. Slater.

Notice to Architects calling for designs.

On the 7th May, 1859, a notice was issued to architects, ¶ calling for plans and designs for the several public buildings proposed to be erected in the city of Ottawa, to be addressed to the Hon the Commissioner of Public Works, which were to be received up to the 1st day of August, 1859, at the office of that Department." In respect to these buildings they were to comprise : " 1st.—Elevations, plans, sections, longitudinal and transverse, specification

* Sl. see plan. † Plan A. ‡ Plan D. § Plan A. ‖ Sl. ¶ F. St.

and estimate of buildings for the Provincial Parliament and Library, the latter to be fireproof. 2nd.—Elevations, plans, and sections, with specification and estimate of the buildings for the Public Departments." For the most approved set of designs for the Parliament Buildings, the sum of £250 was to be awarded as the first premium and £100 as the second. For the Public Departments £250 was awarded as the first premium, and £100 as the second. The plans selected were to become the property of the Commissioner of Public Works. The edifices were proposed to be built in a plain substantial style of architecture, the masonry to be coursed hammer dressed, with neatly pointed joints cut stone quoins, window dressings, cornices, and entablatures. The material was to be found in the vicinity of Ottawa. The interior walls were to be of brickwork."*

Style of buildings called for.

The Commissioner of Public Works limited the expenditure to the following outlay:—For the Parliament House, $300,000; for the Departmental Buildings, $240,000. The drawings were to have a motto attached, and to be accompanied by a sealed envelope containing the name and address of the competitor. On the 11th day of May, 1859, the Department of Public Works published a statement of the accommodation required for the Legislative Buildings, the Government Departments, &c., for the guidance of architects preparing competition plans, but this was so ill considered that it was afterwards found that nine rooms had been omitted for the Bureau of Agriculture.† This omission, with seven rooms still required, was the cause of additional work on the north return of the east wing of the eastern Departmental Building.

Cost of the buildings.

Accommodation to be in them.

The above notice induced certain architects to submit twenty-three separate designs for the Parliamentary and Departmental Buildings; for the Parliamentary Building, sixteen designs by fourteen competitors, and for the Departmental Buildings, seven designs by six competitors.

On the 12th October,‡ 1859, Mr. Keefer had sent for Mr. John Morris, then employed as Clerk of Works on the University of Toronto, and who was afterwards Clerk of Works on these Buildings. On a mode of comparison suggested by him, § embracing what were assumed to be ten of the principal requisites for the buildings:—1st. Fitness of plan and interior arrangement. 2nd. Economy of construction and cost. 3rd. Adaptation to specified and local materials. 4th. Adaptation to site or position. 5th. Adaptation to climate. 6th. Economy of warming and ventilating. 7th. Lighting. 8th. Beauty of design. 9th. Conformity with conditions in regard to information required. 10th. Safety against fire. Leaving out of the question the residence of the Governor General, two designs were selected as entitled to the first premiums offered. That having the motto *Semper Paratus* for the Parliament Building, and that with the motto *Stat nomen in umbra*, for the Departmental Buildings.

Mr. John Morris sent for.

Residence of Governor General not considered here.

On the 25th August, 1859, His Excellency, Sir Edmund Head, furnished a memorandum to the Department of Public Works, with a view to the reconsideration of the report of the Deputy Commissioner, and the Architect, Mr. Rubidge. There was much in this memorandum to recommend it to very attentive consideration, but the suggestions contained in it seem to have been overlooked, especially the one in reference to the rejection of any design which would probably exceed the prescribed cost.

Memorandum of Sir Ed. Head.

* B. B. † Mo. St. K. ‡ Mo. K. § Mo. St.

Duty of the Deputy Commissioner to test the cost of the designs.

Before any designs were adopted, it was the duty of the Department of Public Works to have tested the cost of them by taking out the quantities of the works, and putting fair prices upon them, instead of relying upon any crude mode of cubed measurement, such as was adopted,* or any volunteer tender in confirmation of the correctness of the vague estimates of the competitors who offered the designs.

Report of the Deputy Commissioner and Mr. Rubidge.

On the report of the Deputy Commissioner of the 27th August, 1859,† accompanied by the report of Mr. Rubidge, the Assistant Engineer of the Department of Public Works, of the 23rd August, an Order in Council was made and approved by His Excellency, awarding the first premium to the design with the motto "Semper paratus" for the Parliamentary Building, and to the design with the motto "Stat nomen in umbra" for the Departmental Buildings. It has just been stated what the designs were to be. Those selected were civil Gothic, which, as is now admitted by the Architects and Mr. Keefer, and which it seems then to have been known, could not have been constructed for the appropriation.‡

Volunteer tender not bona fide.

The volunteer tender submitted by the Architects for the construction of the Parliamentary Buildings does not appear to have been made by responsible parties.§ The premiums were awarded for these designs by an Order in Council of the 27th August, 1859, but an opinion was therein expressed "that none of them could be accepted without considerable modifications and improvements, and that the prize exhibitors were to be so informed."‖ On the 1st September, 1859, an Order in Council was passed recommending "that the Architects who obtained the first premiums, should be respectively informed that, though these premiums had been awarded, their plans would not necessarily be adopted unless they could be so altered as to be made satisfactory to the Government, and that therefore if they desired to produce this result, they should repair to Quebec without loss of time, and confer with the Department of Public Works there, without any extra charge to the Government."¶ Accordingly a letter dated the 9th September, 1859, was addressed by the Deputy Commissioner of Public Works, to the Architects of the Parliament Building, describing the modification required, and requesting them to have plans and specifications with forms of tender ready for the approval of the Department, by the 10th of October then next, and for the inspection and examination of parties desirous of tendering, on or before the 15th of October, at Toronto, Ottawa, and Quebec.**

Another letter, dated the 14th September, of the same tenor, was addressed to the Architects of the Departmental Buildings ††

Duty of Department to have sites thoroughly examined.

Having reference to the levels of the ground, which was to be the site of the Buildings, and the position of the rock in the neighborhood, as soon as the outlines of the ground plans of the Buildings had been settled upon, and before the plans were made which were intended to be submitted for tenders for Contract, it became the duty of the principal officer of the Department of Public Works, to recommend to the Government the necessity of a thorough examination of the intended sites, to ascertain the depth of the rock from the surface, and its suitableness for the foundations, on the exact portions of the ground where the respective Buildings were to be placed, in order that the result of the examination might be communicated to the Architects before the plans for tendering were made for the purpose of enabling them to make

* Mo. K. † K. ‡ F. St. K. § F. ‖ F. St. ¶ F. St.
** F. †† St.

the plan strictly adapted to the foundations and to the Buildings as they were actually to be constructed. No such examination, however, took place, or was recommended, although it could have been accomplished at any time, in less than a fortnight, during the summer of 1859, after the 9th June when Mr. Slater's plans and levels were returned to the Department.* On the contrary, after the competition plans had been modified to suit the requirements of the Government, it was agreed between the Deputy Commissioner of Public Works, and the Architects, that the plans to be exhibited to intended tenderers for the Parliamentary Buildings should be made on an assumed line two feet under the assumed ground line, instead of the actual one,† and that the plans to be exhibited for the Departmental Buildings should be on an assumed line three feet three inches below the level of the ground floor. As the Departmental Buildings actually stand, Mr. Stent says the foundation of the excavated parts of the buildings are nine feet below that assumed line, and in the unexcavated part four feet below it. As the Parliamentary Buildings now stand, the assumed foundation line touches the ground in a few places, but the actual foundations are for the most part from two to fifteen feet under the assumed line on the plans. If the actual ground lines had been given to the Architects, part of the difficulty which followed would have been avoided, and if test pits had been sunk, and the true nature and position of the rock ascertained, there would have been no extra work in the foundations of the Buildings, and such an examination would have shown that they could not have been erected for the appropriation. An attentive consideration of the ground levels alone, would have suggested the expediency and economy of placing the Departmental Buildings, especially the eastern one, less underground than they are, thus obviating part of the rock excavation on their sites, and in the ducts and drains leading to, and from these Buildings, as well as dispensing with the areas around their basements.

No such examination made.

If actual ground line had been given and test pits made, no extra work in foundations.

Before the arrival of the Architects to modify and perfect their plans, and on the 8th September, 1859, a notice to Contractors for tenders was published by the Department, stating, that "sealed tenders would be received at that Office till Tuesday the 1st day of November following, at noon, for the erection of the Parliamentary and Departmental Buildings in the city of Ottawa, in accordance with the plans and specifications, which might be seen on application at that Office, and at the Offices of the Architects at Ottawa and Toronto; and for information relative to the Parliament Building, parties were to apply to Messrs. Fuller & Jones, Architects, Ottawa and Toronto; and with regard to the Departmental Buildings, to Messrs. Stent & Laver, Ottawa; and for both at the Office of the Department of Public Works." ‡ The tenders were to be addressed to the Secretary of Public Works, Quebec, and endorsed "Tenders for Public Buildings, Ottawa," and were to be signed by two or more responsible persons, who were willing to become security for the due performance of the Contract. Printed forms of tender were to be supplied, and no tender was to be received unless in accordance with the form. There is in this notice no allusion to schedules of prices being attached to the tenders, but the general practice of the Department was to have them attached to, and form part of the tender and Contract.§

Notice to contractors 8th Sept., 1859, for tenders for Parliamentary and Departmental buildings.

The distribution of printed forms of schedules, and the exhibition of blank printed forms of contract, showing the application of the schedules and the heading of the schedules themselves, clearly indicated that they were

* Sl. † F. St. K. ‡ St. K. § K.

Schedules of prices.

to accompany and form part of the tender.** These schedules of prices are lists, in minute detail, of all classes of contemplated work, to which prices are attached, which prices should fairly represent the rates at which the work is tendered for, and the rates at which all extra and additional work is to be paid for, in case it is performed. They are used for three purposes, 1st, to value contract work, for the monthly payments, called "progress estimates." 2nd, to value extra and additional work; and 3rd, to value work not required to be done, or contract work dispensed with, by reason of changes in the work, as it proceeds.

Use the tender.

When the tenders were opened, it was found that McGreevy's had no schedule of prices, and was ambiguous as to fireproofing, and it was further found that the tender of Mr. Peters was for precisely the same sum, but had a proper schedule, and was not ambiguous. † In the list of seven of the lowest tenders, proposed by the Deputy Commissioner for selection, he wrote against the name on Thomas McGreevy's tender the word "informal." ‡ In fair dealing, Mr. Peters's tender ought to have been accepted; but if it were intended, as the result has shown, that the schedule of prices was not to be applied to extra and additional work, then all tenderers should have been so informed, and all put upon an equal footing.

Chief Commissioner did not feel warranted in rejecting or entertaining Mr. McGreevy's tender.

In his report to the Executive Council of the 17th November, submitting the seven tenders, the Chief Commissioner stated, "that he did not feel warranted either in rejecting or entertaining Mr. McGreevy's tender, and thereupon, on the 22nd of November, an Order in Council was made that the tender of Mr. McGreevy should be received and accepted for the whole work, but that he should be called upon to submit the names of new sureties, and that schedules of prices should be prepared by him to the satisfaction of the Deputy Commissioner of Public Works. § In apparent compliance with this order, Mr. McGreevy did send in a schedule of prices, which was not signed, but was made on one of the printed forms, and bore upon the face of it, that it applied to extraand additional work.‖ On examining it, it was found not applicable to the bulk sum of his contract, and had been so made that if the progress estimates had been prepared and paid upon thesel prices, he would have received the whole contract sum before the work was half finished; it was therefore rejected.¶ At this point, one of the two things was clear, either that he was mistaken in the quantity of work to be done under the intended contract, or that he was trying to impose upon the government. It was fair to presume the first of these alternatives, and he should have been informed that, if he supposed these prices represented in detail the value of the work contemplated by his tender, he was mistaken, and that he must either adapt the schedule to the tender or withdraw it, and he should have been made to understand that without a schedule applicable to the tender, it could not be taken as a tender at all. He refused to put in another, or to have it apply to extra or additional work.** Instead of rejecting his tender, he was allowed to temporize and make his own terms, for, as Mr. McGreevy states it,†† Mr. Keefer, the Deputy Commissioner, agreed, but as the Deputy Commissioner asserts the Commissioner agreed ‡‡ that the schedule of prices to be attached to the contract should not apply to extra and additional work, and as the Commissioner himself states it§§, no agreement was made at all, to give Mr. McGreevy any advantage over other tenderers; but it is certain, that whoever made the agreement, it was carried out with the knowledge of both the Hon. Commissioner and the Deputy.

The schedule he put in.

What Mr. McGreevy should have been told.

He refused to put in another.

* Ber. † Mo. K. ‡ K. § K. ‖ K. ¶ F. K ** K.
†† McG. ‡‡ K. §§ K.

Between the time when the schedule of Mr. McGreevy was put in, (the 29th November, 1859,) and the signing of the contract, on the 7th December, the Architects of the respective buildings and Mr. Morris, were instructed by the Deputy Commissioner to prepare schedules of prices which should apply to the bulk sum of the contract for the Parliament Building and the Departmental Buildings, respectively. †

How the schedules were made and process of making them.

Before anything was done in regard to the preparations for these schedules. Mr. Fuller left Quebec, and they were prepared by Mr. Morris and Mr. St ent, without Mr. McGreevy's knowledge, and in this way :— They procured from the clerk, having the custody of them, the tenders which had been opened; from these they selected three, which they considered bonâ fide and fair tenders; and comparing them and that of Mr. McGreevy, they estimated the ratio of his to be about 35 per cent lower than those selected, and taking the average prices of these they made new schedules of prices at reduced rates for these buildings to represent Mr. McGreevy's bulk tender. Having the quantities of one of the Departmental Buildings, they applied the rates to these quantities, and found they represented the bulk sum of the estimate for that building within £500,‡ and so they assumed the schedules as fairly representing the whole of Mr. McGreevy's bulk tender.

How it was to apply.

To these schedules, it is alleged, Mr. McGreevy never agreed, § except for the purpose of the progress estimates, and Mr. Morris and the Architects understood at that time, from the Deputy Commissioner, that these schedules were not to apply to extra or additional work.‖

Contract to be prepared by Law Officers.

A contract was drawn by the Department on the usual printed form in use, but it was not signed.¶ In the meantime it had been determined to make the Parliamentary Building fire-proof, and by an Order in Council of the 2nd December, 1859, Mr. McGreevy was to be allowed $48.310 for fireproofing in addition to his original tender. Instead of preparing the contract by the Department, which had been usual, it was deemed of sufficient importance to have it prepared by the law officers of the Crown.** Instructions were, therefore, given by Mr. Keefer, to the law officers to draw up a contract between Her Majesty, represented by the Commissioner of Public Works, and Thomas McGreevy and his sureties, for the erection of the Parliament and Departmental Buildings, and among other instructions given was, "schedules of prices to be attached." A draft of this contract was prepared, and Mr. McGreevy's written objections to it had been put in; but before it was settled he had, on the 1st December, 1859, requested the government to let Messrs. Jones & Co., have the erection of the Departmental Buildings, to which request the government, by an Order in Council of the 5th December, 1859, assented, and for these buildings they thus became the contractors precisely in the place of Mr. McGreevy.†† New instructions were given in writing to the Law Officers of the Crown by Mr. Keefer, to draw a contract for the Parliament Building, in which Mr. McGreevy was to be the contractor, for the sum of $348,500, and for the Departmental Buildings, in which Messrs. Jones, Haycock & Co., were to be contractors, for $278,810.‡‡ In these instructions again, schedules of prices are directed to be attached, and the very schedules which had been prepared by Mr. Stent and Mr. Morris, on the printed forms, were sent in without alteration or remark, to be attached, and they were attached to and declared, by the written heading of them, to be part of the respective contracts, and were signed by the contractors as such, when they executed the

See the draft.

New instructions to draw contract.

† Mo. F. St. K. ‡ St. § K. ‖ Mo. F. St. ¶ K. ** Ber. K.
†† K. Ber. ‡‡ Ber.

contracts, on the 7th day of December, 1859, without remark or protest of any kind, by any of the parties to them.†

An agreement so important as not to apply schedules of prices to extra and additional work, aught to have been of sufficient consequence to appear in the instructions to prepare the contract, and if it were really intended, that they should not apply to extra or additional work, the contract should have expressly provided how, and at what rates such work was to be paid. The Department of Public Works sent printed copies of the contracts and schedules to the respective architects for their guidance, but these printed copies did not contain the words, *making these schedules part of the contract*, nor did they show that the contractors had signed them as such.‡ They were not in fact true copies of the original contract in this respect.

Printed copies of contracts did not contain the heading of schedule.

For this omission the Deputy Commissioner cannot account.§

As appears by the records of the Department the scheme of public tender and public competition was carried out according to the practice of the Department. By the form of tenders and schedules, supplied to intending tenderers, schedules of prices were to be put in, applicable to extra and additional as well as to contract work, and were required by the Order in Council accepting the tender of Mr. McGreevy, who put in a schedule in the prescribed form.‖ There were written instructions twice given, and written contracts, in which these schedules of prices are mentioned as fairly carrying out the scheme of tender.¶ Everything appears fair, open, just, but behind all is found a clandestine agreement that these schedules shall not be applied to extra or additional work, which no one avows as his act,** but which has been carried into effect unjustly as regarded the other tenderers, and unjustly as regarded the public interests, as the event has shown.

All appears fair but clandestine agreement behind.

The Department of Public Works is not bound to any particular mode of letting work;†† but having adopted a particular mode, it ought to have been strictly carried out. That the officers of the Department felt this in the first instance, is shown by the fact, that nine tenders were received after noon of the day on which they were to have been put in; they were consequently not opened, and were actually produced before the Commission still unopened, to show how impartial their dealings with tenderers had been.‡‡ How far this strict impartial dealing was adhered to, in a most important point, has just been shown.

Department should have fairly carried out their own scheme of letting the work.

Referring to the contracts as executed, it is alleged§§ that they are so drawn as to carry out the arrangement, by not expressly providing for the payment of extra or additional work, at the prices mentioned in the schedule. The fourth section of the thirteenth clause, providing for such work, says:—"The same shall be allowed to the contractor, not rated by the schedule of prices, as is said by the architects and the Deputy Commissioner, but at fair current rates."‖‖ If, however, the whole contract be read, and the heading of the schedules also, as part of it, then after the word "allowed" should be read, "at the rates and prices mentioned in the schedule of prices, which schedule is embodied in, and forms part of, the contract." In another respect, while he was the tenderer for all the buildings, Mr. McGreevy was allowed to make his own terms.*

How it is alleged the contracts were drawn.

Construction of contracts.

† M. ‡ See printed contract annexed. § K. ‖ K. Ber. ¶ K. Ber. ** K. Ber.
†† K. ‡‡ K. §§ K. ‖‖ F. St. K. * K.

At the time the plans were exhibited to intending tenderers, there was submitted with them blank printed copies of contract in use in the Department of Public Works, and those tendering were left to infer that this form of contract was, in its principal clauses, the one to be used. That the Department so understood it, appears from the fact that the first original draft of the contract was on this form.† It and the subsequent draft contained a clause to the effect, "that in case the amount voted for this service by the Legislature should be at any time expended previous to the completion of the work contracted for, the contractor might, or might not, as he saw fit, on receiving a notice in writing from the Department to that effect, stop the work; but in any case the contractor should not be entitled to any further payment for work done, after the service of the notice, until the necessary funds should have been voted by the Legislature, nor should the contractors have any claim for compensation or damages for the suspension of payment." When the original draft-contract was submitted to Mr. McGreevy, he objected to this clause, and at his suggestion it was left out.‡ In this respect he gained an advantage over all the other tenderers. And the fact, that this clause was not in the contract, as had been usual, was taken by the Hon. Mr. Killaly as the ground for considering, in his judgment, the Government liable to the contractors for the amount of such losses as they could establish, because of the suspension of the works.§

Mr. McGreevy allowed to make his own terms in having the clause struck out, relating to the contractors having no claim for suspension of payments if appropriation exhausted.

Another clause in the contract, in view of heating and ventilating, requires to be noticed. This clause is the ninth, and provides, "that whenever, or so often, as it be necessary for the contractor to co-operate with any person contracting for supplying or placing the apparatus for heating the buildings, the contractors shall diligently, and under the directions of the Architects in charge, or the Clerks of Works, perform all such work as shall be requisite or proper, on the part of the contractor, for building in, securing, and placing in proper position, the flues or other apparatus required for heating, in such a manner as to prevent the possibility of fire therefrom, and without any extra charge therefor, and shall be bound in all things to conform to the direction of the Commissioner touching such work."‖ This clause was never once construed, by any officer of the Department, or by the architects, as meaning anything, for, as the fact is, the alteration of any wall or flue from the contract plan, to agree with that of Mr. Garth, was allowed as an extra, without question, although it is submitted the contractors for these buildings were to co-operate with the contractor for heating and ventilating without any extra charge, so far as the flues were concerned. The competition plans had provision for heating and ventilating, and in regard to the system in the Parliamentary Buildings, it was declared by the architects in their report, accompanying their competition designs, that¶ "The greatest attention has been given to the warming and ventilating of the houses and offices, &c., in connection therewith, and the architects from their experience on this subject, in the erection of many important buildings in England and elsewhere, are able to guarantee that the system they propose would be most efficient. In order to obtain a thorough ventilation, it is absolutely necessary to provide an ample supply of pure air, to be warmed in winter, and *vice versa*, in summer, and to provide efficient means for abstracting the air, as it becomes vitiated. For this purpose, flues are provided of sufficient area, according to the dimensions of the rooms, corridors, &c., both for the supply of the pure air and the extraction of the vitiated, and are so arranged that all inconvenience of draught would be avoided, and the supply be regulated according to the requirements; but in a climate such as

Clause in contracts relative to co-operating with contractor for heating.

Never construed as meaning anything.

† K. ‡ See Cn. § B. B. ‖ See Cn. ¶ F., Report with competing designs.

Canada, the method for winter and summer requires to be separatel described."

"All the windows having double sashes, and the external entrances and lobbies having double doors, little or no egress for fresh air is to be relied on; in fact, in order to thoroughly warm the buildings, it is necessary to guard against it. It is proposed to effect this by a sufficient number of apparatus for heating the air, both by steam and hot water pipes, the apparatus being fixed in the most convenient situations, and the steam forced through the pipes by powerful engines. The houses, and rooms on the ground floor, it is proposed to warm by fresh air admitted by shafts from the interior into chambers in which the furnaces, with coils of pipes, &c., are erected, and the air so heated will be moistened by jets of steam or large shallow tanks of water, so that the unpleasant effect of air heated by contact with hot metal will be avoided. It will thence be conducted by flues to the various apartments, and the apparatus by which it is admitted will be provided with guaze wire, so as to distribute it and prevent draught, and also sliding valves, so that it may be regulated according to requirements. Flues for the extraction of vitiated air would be taken from each room in area or number, according to the cubic contents of the room, and carried into a flue which would be taken from each room, and carried into a main flue, which would be taken into the nearest ventilating tower or shaft. In this tower, immediately above where the flues enter, a small furnace would be kept burning (or a sufficient number of gas jets would answer equally well), this, by rarifying the air, would create a *vaccuum*, and cause the extraction of all the vitiated air from the rooms, and thus enforce the entrance of the warmed and pure air. In the houses and corridors, the chambers between the ceilings and outside covering would, when occupied, be kept heated by the gas jets, and thus form an additional and most powerful extracting flue. It is proposed in all cases, in order to avoid unpleasant draughts in the opening of the doors, to thoroughly warm all the corridors and passages; in fact, without that being properly effected, it would be impossible ever to obtain a thorough system."

Summer ventilation.

"The pure air to be admitted from shafts as before specified, and cooled by means of fans about five feet in diameter, driven by the engines, and thence conducted to the rooms by flues provided for hot air. The system of the extracting flues would have to be kept up precisely in the same manner as specified for winter use, and by these means the whole of the buildings might be kept at a temperature considerably below that of the external air."

Open fire-places.

"But in addition to this, fire places are provided for all rooms, and the sashes would all be made to open for summer use."

Baths and Lavatories.

"The baths and lavatories would be supplied with warm water heated by furnaces, and all the water closets and urinals would have a chamber of hot air provided, in which the pipes would be taken to avoid danger of freezing."

"The architects trust that the foregoing description supplies sufficient information to give the Board assurance that the subject is understood and will be properly treated."

But Mr. Fuller in his evidence says:* "We had been directed by the instructions of the 9th September to put five boilers in the area without the main

* F.

walls, but on the 20th September I wrote to Mr. Keefer to say that, on conferring with the parties who constructed the heating apparatus in the Toronto University, we thought two boilers in the central court better than five, and to have fans to drive the heated air in winter, and the cold air in summer through the building. He answered by telegraph that "our plan for heating by two boilers was approved.'"

Mr. Fuller further says: "It would have been impossible to have prepared the plans in time showing the system of heating and ventilating, and as far as my experience extends, it was a responsibility not usually thrown upon architects in charge of buildings of this extent. Heating is in itself a separate branch of construction, and I know of no public building in England which has not been done by persons professing that branch of business under the superintendence of the architects. The plans provided ventilating flues from ventilating shafts, the ordinary fire places, and two large flues for the use of boilers."

As regards the heating and ventilating of the Departmental Buildings, Messrs. Stent and Laver report with their competition plans that† "The system of heating and ventilating to be that in general use in England, known as Haydn's patent, or, if preferred, a plan of more local character can be adopted, each room to be separately heated by a register and ventilated one or more of the most approved valvular gratings, and connecting with the main shaft in the centre of the building."

Statement of Mr. Stent in evidence.

But Mr. Stent, in his evidence, says‡: "We had not contemplated any complex system of heating; we had provided for the ordinary ventilation. Our plan provided a boiler house, extracting and smoke shaft, but we had directions from Mr. Keefer to the effect that the heating of the buildings should be left out of the specification and made a separate contract."

Number of competing tenders.

On the 14th day of November, 1859, notices were issued inviting tenders for heating and ventilating, which were to be delivered to the Department on or before the 30th day of December next, but subsequently postponed till the 16th January, 1860.§ This induced five competitors to give in tenders for the work, but by an Order in Council of the 28th January, 1860, it was given to Mr. Garth of Montreal,‖ whose tender was $61,285 for heating and ventilating, exclusive of excavation, mason's, and bricklayer's and joiner's work.¶

In awarding this contract to Mr. Garth, the express terms of the notice seem to have been entirely overlooked, for the tenderers were to state a bulk sum for which the contractor was willing to supply all materials and construct, erect, and put in successful operation all the work, machinery and appliances connected with the entire system of heating for each building,** but notwithstanding this, his tender was received, which excepted excavations, &c., as has just been stated.

He tendered to put in the heating apparatus and such things as were necessary for it and for ventilation, but excepted from his tender the adaptation of the building to receive his boilers and apparatus, the excavations, the construction of the ducts, hot air chambers, flues, boiler houses, and everything which it required.††

How the enormous outlay was incurred.

To understand how the enormous outlay connected with the introduction of the system of heating and ventilating was incurred, and how much is

† St. ‡ St. § F. St. K. ‖ Ga. ¶ F. St. K. ** See Tr. †† Ga.

justly attributable to it, and how much is not so, it will be necessary to give a brief description of it.

Coil system.

The mode of heating embraced by Mr. Garth's contract is the "coil system" applied in two ways, the common and the vault system.

Common.

The common is to have coils of iron pipe in all the rooms and passages intended to be heated. The vault system is to have vaults or chambers underneath the building in which the coils of iron pipes are placed, and in which all the air is heated, and then conveyed through flues in the walls from the vaults to every passage and room to be heated.

Boilers, where placed.

These coils of pipe are connected with boilers such as are in ordinary use for steam engines. In these buildings the boilers are placed in separate apartments called boiler houses, outside the buildings, and are on levels lower than the lowest coil of pipe. When steam is raised in the boilers, it forces itself through the coils of pipes which are heated by it in its passage through them, and when it condenses returns as water through the lowest pipes directly into the boilers.

Pumping of condensed water.

In buildings where the boilers cannot be placed under the level of the lowest coil, the water produced from the condensed steam falls into a cistern from which it has to be pumped into the boilers, and becomes cooled by the process, the constant pumping of this water into the boilers entails the expense of a small engine to work the pumps; where, on the contrary, the boilers stand on levels lower than the coil, economy is effected by getting the water returned to them at a higher temperature without pumping.

No cistern or pumping required.

The circulation through the pipes is continued by the passage of steam through them from the boilers which returns to them as water. The heating system without cistern or continuous pumping is applied to these buildings, but the other is spoken of to show what Mr. Garth's plan of placing his boilers ten feet lower has accomplished, and what expense it has led to in its adaptation to these buildings.

Ventilation.

Ventilation forms a part of his plan, and is inseparable from every proper mode of heating buildings.

Where vaults are.

The vaults or chambers in which the air is heated for the use of the buildings are situated in the basements, and are supplied with external air through long ducts leading from the edge of the bank and from several other points about the buildings. The cold air passing through these ducts into the warming vaults comes in contact with the coils of pipe heated by the steam, and being heated by the coils passes through these hot air vaults, and flues to every room and passage intended to be heated. Every passage and room has a register to admit, limit, or stop the supply of hot air at the pleasure of the occupant. The hot air would not pass into the rooms without pressure, unless means were provided to allow the air already in them to escape and make room for the freshly heated.

Special adaptation of Legislative Chambers to ventilate.

The escape of the vitiated air, as it is called, is provided for by ventilating flues and shafts in different parts of the building. To ventilate more thoroughly the Legislative Chambers and the Library, special adaptation has been provided by flues near the floor lines, and in the floors of these chambers which communicate with what is called the main smoke and ventilating shaft, a column of masonry 15 feet square and to be 128

eet in height.* In the centre of this shaft are two iron smoke pipes, each two feet in diameter, to take the smoke from the fires under the boilers. The heat from the smoke pipes communicates with the air in the shaft around them, and causes an upward current from the base of the shaft which has no external opening other than these flues from the Legislative Chambers and the Library, the vitiated air from which passing off downwards to the base of the shaft, then upwards through between the walls of the shaft and the iron smoke pipes to the open air. This contrivance is called "the downward ventilation."

Description of downward ventilation.

The Legislative Chambers and Library, as well as all the other rooms in the Buildings, have flues, however, through which the heated and vitiated air passes upward to the other ventilating shaft of the Buildings. These arrangements embrace the whole system of heating and ventilating, but experience has shown that drawbacks exist in its practical operation.

These chambers and all rooms have flues for escape of air upwards.

In cold weather, the first coils which come in contact with the external air in hard frost, have the steam contained in them suddenly condensed, the water freezes, and stops the circulation, by which all the pipes and coils cease to act.

To obviate this, Mr. Garth's system is to allow the external air to pass through long ducts,† to modify its temperature as he supposes, before it reaches the coils, so as not to freeze them. Hence his desire to have long ducts constructed as essential to the proper working of his system. These ducts, he supposes, will obviate the necessity of fans,‡ which are required to force the air into the warming vaults, and through the Buildings, when the external air is brought down through shafts close to the Buildings.

These fans are constructed on the same principle as those used for winnowing, but specially adapted for the purpose of forcing into the warming vaults and flues, a large volume of air. The fans are driven by a steam engine, which will not be required if this system succeeds, but in case of its not succeeding, provision has been made in the construction of the main duct, for the Legislative Chambers, for the introduction of a fan into it if required, at the expense of the Government.

Fans for drawing air.

A steam engine in any event had to be attached to the boilers to furnish them, and the cistern on the top of the buildings, with water,§ and the small economy in the expense of pumping the condensed water from the steam-pipes into the boilers again, was nothing compared to the expense of deepening the boiler houses ten feet in rock, in all the buildings, lining their sides with ashlar masonry, deepening the main drains of the buildings in rock, and constructing the main sewers in them all, ten feet below their intended levels.‖ In point of economy too, the consideration that the temperature of the air in passing through the long ducts into the warm air vaults, would be so modified as to prevent the steam coils from freezing, and the dispensing with the engine for driving the fan,¶ is enormously outweighed by the fact that these external ducts have been constructed at an outlay of $76,751.01 in all the buildings. Mr. Garth's contract was to put in the boilers, coils, registers and everything connected with the heating apparatus, but he had nothing to do with the air ducts or flues, or the adaptation of the buildings to his system.** It was the excavation for the boiler houses and air ducts, the masonry in them,

Economy enormously outweighed in another respect.

* Mo. F. † Ga. ‡ Ga. § Ga. ‖ Mo. F. St. K. ¶ Ga. ** Ga.

What Mr. Garth's contract was.

and the constructing his smoke and air shafts, ventilating flues and shafts, together with the additional depth of drainage required, which have cost so enormous a sum.* The system, however proper, as such, and however much Mr. Garth's contract was within the appropriation, could in no way justify, in the mere adaptation of the ducts and buildings to it, an expense equal, as the event has shown, and as ordinary prudence could have foreseen, to $333,000, including work in and exterior to the buildings.

Grave feature in mismanagement was, in allowing these works to be proceeded with, and paid for without estimate, or any arrangement about prices.

The gravest feature in the whole mismanagement was, that the works connected with the heating and ventilating system were allowed by the Deputy Commissioner to be undertaken, proceeded with, and paid for, without estimate being made or called for, without a contract, without any check, any schedule of prices, or any arrangement whatever as to terms or price of work.† The extraordinary expenditure was shown by the monthly estimates for the year 1860, for they exhibit extras, amounting to the sum of $311,420,‡ which could in no way be accounted for, by the mere fact, of extra excavation, and extra work under the assumed foundation lines of the buildings. Considering the extent of work required for this system, and the complication it was likely to produce, it was the duty of the practical head of the Department of Public Works, not to have allowed plans for the buildings to be exhibited to tenderers, until that for heating and ventilating had been maturely adopted, and incorporated with the plans, and in the specifications for the construction of the buildings. This was not done, nor was any precaution whatever taken to prevent the confusion, and vast amount of extra and additional work which subseqnently took place.

Garth was refused advances while all this expenditure was going on.

In connection with this, while extra work was being performed without order or estimate, and paid for to the other contractors from month to month, during the working season, of 1860, to the amount of $103,108, in anticipation of Mr. Garth's contract, which was not signed till the 12th January, 1861, although his tender was accepted on the 28th day of January, 1860. In reply to his application for advances in the meantime, he was informed that nothing could be paid to him, for anything he had delivered or done, until his contract was signed.§

Reasons of Deputy Commissioner for not incorporating the plans for heating and ventilating, with the other plans.

The Deputy Commissioner alleges that if all the plans had been perfected, and all the usual and necessary precautions adopted, in reference to the construction of these buildings, little could have been done till the summer of the year 1860,‖ indeed nothing was done or could be done until the plans of the buildings and those of Mr. Garth for heating and ventilating were incorporated, during the winter, and up to the 12th of April, 1860, when they were so far matured as to admit of the masonry going on.¶

9th September, 1859, Mr. Morris requested to enquire into materials in the vicinity of Ottawa.

On the 9th of September, 1859, Mr. Morris had been requested by Mr. Keefer to inquire into the character of the materials available in the vicinity of Ottawa, for the Public Buildings,** and although the Nepean sand-stone was known to exist in the neighborhood, for want of practical industry he failed to discover it, and on the 4th day of October reported his views,†† in which this sand-stone is not spoken of, but Gloucester limestone is suggested as the stone available for the purpose. The very dark colour of this stone, as well as the want of durability, which had become manifest in the decay of the Locks and Sapper's Bridge of the Rideau Canal, where blue lime stone of a similar character had been used, induced the Deputy Commissioner to cause inquiries to be

* Mo. F. St. † F. St. K. Ru. ** Mo. K. ‡ P. E. § Ga. K. ‖ K. †† Mo. ¶ Mo. F. St.

made for other stone in the neighbourhood,* and in a heap of stone brought in for this purpose, was this light coloured hard Nepean stone, which was at once pronounced upon, as that best adapted for the style of the buildings, for colour, durability, and the resistance it made to the action of fire. At the suggestion of the architects, and the Deputy Commissioner, it was determined this stone should be used, instead of the Gloucester blue limestone. † On the 15th February, 1860, Mr. Morris was requested to state his views:—1st., as to the quality of the Nepean and Templeton stone, its architectural effect and durability, as compared with the limestones and, 2nd., his opinion as to the difference of cost.‡ On the 22nd February, 1860, he made his report, which is published in the blue book, page 259. He makes out the difference in cost between the Gloucester and Nepean stone is to be 21 cents per cubic foot, and recommends the sandstone as judicious, at the same time suggesting that the expense might be properly charged to the general item of precaution against the effects of fire.§ On receipt of this letter, and the letters of Messrs. Stent & Laver, of the 25th January, 1860, Messrs. Fuller & Jones, of the 27th January, and of Sir William Logan, of the 18th February, Mr Keefer recommended the substitution of Nepean stone for the limestone, in his report of the 28th February, 1860.

Enquiries for other by the Deputy Commissioner.

The Chief Commissioner in his report of the 10th March, saw no reason for changing the materials determined upon, and specified in the contract, but by an Order in Council of the 2nd June, 1860, the substitution was determined upon, and the contractors were to be called on to assent to the change, and to agree to the difference of estimate in the expense, (21 cents per foot,) and also to agree that the present contracts should remain in every way intact."‖ To this substitution, and the price authorized for it, Mr. McGreevy expressly agreed, by his letter of the 15th day of August, 1860, in which he says, "I agree to the change, and accept the price mentioned, viz: 21 cents per superficial foot."¶

Chief Commissioner sees no reason to change.

Mr. McGreevy agrees. See letter marked 107.

Messrs. Jones, Haycock & Co., did not expressly agree as he did, but they began the work, and carried it on, and to this extent they acquiesced in the change, at the price stipulated by the Government. No tests** were applied to try the durability of the stone used in the buildings, but Sir William Logan's letter, referred to, expressed his opinion in favour of that formation, of which Nepean sandstone, and Brockville stone are composed.††

Messrs. Jones, Haycock & Co. do not, but acquiesce by doing the work.

Potsdam red sandstone is used in the relieving arches and mosaic work over the windows, the enduring quality of which is unquestioned. The durability of Ohio stone, seems not to have been tested or questioned, though grave doubts arise in the opinion of the Commissioners whether it will stand in the plinths exposed to the water from the roofs, and exposed weatherings, and whether it will sustain great pressure, unless on its natural bed, such as will occur in the arches and weatherings under them, in the base of the main tower.

Ohio stone, its durability doubted and its fitness to sustain great weight.

There seems to have been no perfect understanding with the Architects and the Department as to their renumeration, their duties, and responsibilities. As regards their renumeration they say, Mr. Keefer agreed they were to have five per cent on the outlay.‡‡ True, there was an Order in Council limiting their renumeration to $33,000,—but they say they never assented to it, and claimed from Mr Rose, and yet claim to be paid five per cent on the *whole outlay*, as their right. In this view of their claim to renumeration for

* K. ‖‡ F. St. K. ** Mo. ‡ Mo. § Mo. †† St. ‖ B.B. ¶ See McG's letter. ‡‡ F.

What was expected from them in view of this unsettled claim to per centage.

all expenditure, and in view of the express provision of the contracts,* that no extra work whatever should be done without the written authority of the Commissioner of Public Works, given prior to the execution of the work, or any allowance, or payment whatever be made for the same, in case it should be done without such authority; it was their duty not to have allowed any work to be done, or recognized any claims made for it, without such written authority of the Commissioner, and yet nearly the whole of the extra and additional work was undertaken and done, as if no such clause in the contract existed. They allege that their duty † as regards the correctness of the foundation and other walls was performed when they furnished copies of the contract plans, placed in an office open to all concerned, on a scale of 10 feet to an inch for the Parliamentary Buildings, and 12 feet to an inch for the Deprrtmental Buildings, figured only as regarded their exterior dimensions, east and west, north and south, but the sizes of the rooms and the thickness of the walls not figured upon them, and that they were not bound to give, and did not give any plans of the foundation walls, or figured plans of the basement and other floors of the buildings.

What they allege in reference to their duties.

Claim exemption from responsibility because they had not the nomination of clerks of works.

They claim to be exempt from responsibility for mistakes and errors in construction, and for correctness of measurement, because they had not the nomination of clerks of works, and from the fact that Mr. Morris, the chief clerk of the works, although nominally under them, was in their opinion over them, having the ear of the Government, and in communication with it, instead of them, and in charge of the grounds independently of them.‡

If Mr. Morris usurped authority which did not of right belong to him, and ordered work, as he avowedly did, on his own authority without their express orders, or if he were unequal to the duties he undertook to perform, it was alike due to their own position, and the duty they owed to the Government, promptly to report it, which they omitted to do.

Architects never did measure work.

The architects never did in fact, measure any of the work,§ although from the monthly estimates signed by them, it would be inferred they had done so. Mr. Morris had no correct measurements or sections of the rock excavations, nor had the architects.‖ It is said the book in which the measurements were entered for the greater part of the first year was lost,¶ but at the same time, they are admitted to have been only approximate ones, the quantities being those put into the progress estimates.

Book was lost.

Grist had a copy of most of it.

Mr. Grist had a copy of a large portion of this book, but it furnished no definite information.** Mr. Morris says he intended in the winter of 1860-61, to have gone over those measurements; but never did.†† Much has been said about the loss of this book, but it is fair to say, that it was more likely to disappear from the little it contained, and the little consequence it possessed, than from the information it could have given. The architects trusted to the competency and care of Mr. Morris‡‡ to see that the foundations and all other portions of the buildings were properly laid out from the plans furnished by them, but he greatly neglected his duty in this respect.

Architects did not test the correctness of walls at first.

The architects of the Parliamentary Buildings especially, never themselves tested the correctness of the walls till they had been carried up to the level of the basement and ground floors, and then they discovered, with surprise, that many of them were wrong,—many out of place, some useless, many too

* See Cn. † F. St. ‡ F. St. § F. St. ‖ Mo. F. ¶ F. ** G.
†† Mo. ‡‡ F. St.

thick,*—and they then betook themselves earnestly to set them right by causing new walls to be built, others to be thickened to suit the upper walls, others to be corbelled over, all presenting the consequences of gross want of attention in the first instance. Mr Morris, on being questioned, admits he laid off the walls of the Parliamentary Building, encircled by a black line, marked by him on the plan D. This plan shows at a glance, by the light blue coloring, what the walls are as executed; and by the dark blue, what they were intended to have been by the contract.†

What Mr. Morris admits he laid out.

He does not know who laid out the portion not done by himself; he thinks "it was Grist, or the contractor's foreman,"‡ but he alone was charged with this duty. Mr. Grist denies laying out any.§ The contractors foreman admits laying out some, and says Mr. Grist and Mr. Morris did the rest; but that he, having no directions, and being unable to obtain any from those who should have given them, did not stand about the thickness of the walls, or the exact correctness of their position, and being in the interest of the contractors he would not keep the men idle. He made the walls thick, and where chimney breaks were shown on the plan, they were built solid across the whole wall, because it was easier,—in using the rough stuff to do it, and no one objected to it.‖ Mr. Morris, Mr. Grist, the architects, all agree, that right or wrong, unnecessarily thick or not, corresponding with the plan or not, all that was done was measured and allowed for in the progress estimates.¶ Mr. Bowes and Mr. Pattison say they measured all such work for the Hon. Mr Killaly's estimate.**

McGreevy's foreman's account of how the walls were made.

Mr. Morris was sole clerk of works for all the buildings up to the 19th day of April, 1860, when Mr. William Hutchison came. They two were clerks of works till the 20th day of June, 1860, when Mr. John Grist was appointed.†† The Department of Public Works supposed that Mr. Morris would be sufficient to superintend all the buildings during the first winter; ‡‡ but this would have been a charge too heavy for a man of much greater practical abilities. No one, however capable or energetic, could have properly done the work thrown upon him, up to June, 1860. He assumed the right and power to give instructions to do work, which neither the contract nor the circumstances warranted. As instances of this, he directed the foundation of the principal staircases to be of solid masonry; §§ and he directed or sanctioned most of the superfluous and unnecessary rock work in the excavations, and most of the useless masonry in the foundations.‖‖ Over a large portion of the interior of the building, the rock was near the surface. In making the air-ducts it was necessary to blast it in two directions, but without any authority from the Department, Mr. Morris allowed, if he did not direct, this whole rock to be excavated deeper than was required, and kept no correct measurements or sections of it,¶¶ so that about 1,700 cubic yards*** are claimed by the contractor over and above what is admitted to have been done by the clerks of works; and as already stated, no sections were made at the time, to be kept on record as the correct dimensions and shape of the excavation. By the regulations laid down in the first instance, and indeed by the terms of the contract, no extra work was to be done without the written order of the architects, approved by the Department.††† There never was any written order by any officers of the Department to excavate rock exterior to the buildings;‡‡‡ but there was the verbal order of the Deputy Commissioner to excavate it to a limited extent in the interior;§§§ and yet, in defiance of the terms of the contract, and of these regulations, the work was allowed and paid

Period for which Mr. Morris was sole clerk of works.

Assumed too much power to order work.

Rock excavation.

No sections kept or reliable measurements.

No extra work was to be done without written order of architects, approved by Department.

* F. † See Pu. ‡ Mo. § G. ‖ H. ¶ Mo 3 F. St. G. ** Bo. Pt. †† Mo. G.
‡‡ K. §§ Mo. ‖‖ H. Bu. ¶¶ Mo. *** Bo. ††† See Cn.
‡‡‡ K. §§§ K.

Contract also provided this.

for in the progress estimates, from month to month, to the extent shown by these estimates.* The contracts provided that no extra work was to be performed without orders, and an order-book was provided for the purpose.† The first and only order ever given in compliance with this stipulation for the Parliamentary Buildings, was on the 12th day of December, 1859, but delivered to the contractor on the 14th day of February, 1860. It is as follows:—‡

Order.

"You are hereby requested to excavate the ground for the various foundations down to the surface of the rock, and also the whole area of the central court, and all the trenches requisite for the cold air-ducts in connection with the warming apparatus; and leave openings for the doors in the basement walls of the rooms in the front part of the building, so as to give access and fit them for future use, should they be required; giving them light also, from without, and fire-places within, as shown on the working drawings."

The first and only order ever given for the Departmental Buildings, was on the 10th December, 1859, but delivered to the contractors on the 16th day of March, 1860, as follows:—§

"You are hereby requested to continue the surface excavations under the suites of rooms of both blocks of Departmental Buildings next Wellington street to admit of future use of those portions of the basement; also to excavate trenches for all walls, piers, &c., of both blocks down to the solid rock, and to level the same; and also to excavate for boiler houses and other work connected with the contract for heating and ventilating; continue the walls down to the rock in every case, and make door-ways, windows and fire places in the suites of rooms in those portions of the basement above mentioned."

No one reading these orders could imagine that the excavations were to go deeper than the rock or exterior to the buildings; but they are the only written authority upon which the enormous rock excavations were made.

Instead of going to the rock only, or confining the excavations to the foundations of the buildings, rock excavations were made,—

In March, 1860, to the extent of	5,434	cubic yards,	$11,345.55
In April, " "	4,031	"	7,546.05
In May, " "	6,468	"	17,087.95
In June, " "	8,732	"	15,342.75
In July, " "	3,455	"	9,500.55
August and September,	9,602	"	26,107.55
October and November,	2,529	"	9,055.75
Total,	40,251		$95,986.15

As shown in the progress estimates.‖

Strict regard not paid to terms in progress estimate.

With reference to the classes of extra work in the progress estimates, strict regard was not paid to the terms used. A great deal of excavation was classed as "hardpan," which was not so in fact. Clay which was harder to excavate than ordinary, by reason of being mixed with gravel or boulders, was called "hardpan;" so was froze

* See P.E. † Mo. ‡ F. § St. ‖ See P. E. ¶ Mo.

arth.* That there was, in some instances, water in the excavations, is said to have induced the allowance of extra prices; but it will be found that pumping this water forms an item in the extra day bills in the same progress estimates,† to which reference must be had for the details of the expenditure for extra and additional work, as well as the filling in of earth in the foundations,‡ for which extra prices were given, for ramming, while at the same time this ramming also was allowed for in the day bills.§

Water in excavations, how allowed for.

The vast extent of the excavations in regard to ducts, drains, and boiler houses, will be best understood by referring to the plans marked G, L and M,‖ which show where these are situated, how they radiate from the Buildings, and go through them, and to the sections of them to show their depth and width and the useless and extensive amount of masonry, and their erroneous construction. To enable Mr. Garth to dispense with pumping the condensed water, he asked the Deputy Commissioner if his boilers could be placed ten feet lower than the level of the basement floor Without considering what additional expense it would entail, he was told by Mr. Keefer that he could; ¶ and forthwith the excavations for the boiler houses were directed by the architects to be made ten feet deeper in the rock. The one in the Parliamentary building is 85 by 79 feet, that in the eastern Departmental building 42 by 31 feet, and in the western Departmental building 40 by 40 feet; ** all 10 feet deeper in the rock than originally contemplated. This increased depth required the main drains to be ten feet deeper than before.

Reference to plan to show where ducts, drains, and boiler houses are.

Boiler houses, and size of extra excavation in them.

The one from the eastern Departmental building was made 385 feet long, 22 feet deep, 14 feet wide at bottom, 25 feet wide at top The one from the western Departmental building 418 feet long, 25 feet deep, 15 feet wide at bottom, 22 feet wide at top, and that from the Parliament Building 396 feet long, 15 feet deep, 9 feet wide at bottom, 17 feet wide at top. These are the average dimensions of them.

There are in the eastern Departmental building three air ducts leading from the west front 9 feet below the surface of the ground. They were supposed to come out level with the ground in the terrace wall, but the building having been sunk so much lower in the ground than was originally intended, there cannot now be any terrace, consequently they must terminate in a shaft, and will require to be drained, as no provision has been made for drainage, otherwise they will have to be abandoned.††

In excavating for these ducts through the Parliamentary building, it is said the rock was shattered, and, immediately the whole of the rock within the building was verbally ordered by Mr. Morris, under the direction of the architects, to be excavated.‡‡

What should and should not have been excavated.

It was proper to excavate the rock for the outer foundation walls to the depth of three feet, from the surface, but beyond this depth, and for the interior foundation walls, it was unnecessary. To the extent of about 6,370 cubic yards, rock excavation was required to be moved in this view of it, but there were instead about 13,175 cubic yards of rock excavated in the interior of the Parliamentary building. In all the buildings it has just been seen that, inclusive of ducts and drains, 40,000 cubic yards were excavated as extra work, as the progress estimates from time to time showed.§§ All the

* Hu. † Hu. ‡ See P. E. § Hu. ‖ See Pus. ¶ Ga. ** Measts. by Comm.
†† See Pu. ‡‡ Mo. F. St. §§ See P. E.

extra work mentioned in these estimates was allowed and paid for with little question or remark, except as will be immediately noticed, to sanction prices, and a departure from the schedule of prices attached to, and forming part of the contract. *

How extra prices were sanctioned.

Before any extra work had been returned, and in anticipation of it, a correspondence between the architects and the Department took place. It is of great importance as showing that the schedule of prices attached to the contract, was not intended to be applied to extra and additional work, and that the Hon. Mr. Rose had this matter specially before him. † The first letter is from the Secretary of Public Works to the Architects of the Departmental buildings. It is dated the 7th February, 1860, and states as follows:—"In reference to your letter of the 1st instant, on the nature of the soil for the site of the right hand block of the Departmental Buildings, Ottawa, I am directed by the Hon. the Commissioner to inform you that he approves of carrying the foundation down to the rock in all parts of the right hand block of the Departmental buildings, but before the order is given for it, he desires to be furnished with an estimate in detail of the quantities of masonry and the prices at which the extra work is to be estimated, which with the assistance of the clerk of works you are desired to prepare and send to this Office."

Correspondence.

Desires an estimate first.

To this on the 28th February, the Architects send the following reply:—"Referring to your favour of the 7th inst., requesting to be furnished with a detailed statement and prices for proposed extra depth of foundation to the rock of the right hand Departmental building, we beg to say that we find it impracticable to furnish you with the precise quantities of work, owing to the uncertain level of the rock, but annex herewith the prices on which our calculations for the extra work have been made."

Reply of Architects of Departmental buildings.

"We have reason to believe on further examining the ground that the approximate estimate which we furnished in our communication of the 1st instant, will not be exceeded. Masonry per toise of 72 feet in trenches, $9.66. Rock excavation in trenches below 5 feet, $1.90. Rock excavation to 5 feet, $1.25."

Estimated prices.

A note on the back of the above signed S. Keefer, 5th March, says:—"I do not approve of these prices; they are too high; when the work commences, the opinion of the clerk of works should be asked."

Note of Mr. Keefer—prices too high.

The next in order is again from the Architects of the Departmental buildings to the Commissioner, and of date March 12th, 1860. It is as follows:—"We are in receipt of your favour of the 8th inst., informing us the Deputy Commissioner does not approve of the prices given by us for extra walling and excavation, which we had the honour of submitting to you in our letter of the 28th ult. We beg to say that the prices were arrived at in a conference with Messrs. Fuller & Jones, Mr. Morris, and ourselves, held with the special purpose of arriving at prices for extra work, the decision and prices being entered in the minute book at the clerk of works office, and applying equally to both the Parliamentary and Departmental buildings, the toise of 54 feet being used in the Parliamentary building, and the local toise of 72 feet adopted by us, the prices being in the same proportion.

Architects of Departmental Buildings to Department of works.

"We take the liberty of suggesting that a schedule of prices for extra work shall be prepared by the several architects employed in the Public Works here, which shall be the basis upon which all extra work shall be valued."

* See Cu. † K.

A note on the back of the above, signed S. Keefer, 19th March, 1860, states:—"This is a good suggestion, and I recommend that it be at once acted on, by calling upon each of the architects, and the clerk of works to forward a list of the prices at which the extra work should be returned and paid for in the progress estimates."

Suggestion of Mr. Keefer.

Another note on the back of the same letter, in the Secretary's hand writing, says, "act on this."

Note of Secretary.

Then follows a letter from the Secretary of the Department to all the architects, of the 23rd March, saying:—"I am directed by the Honorable the Commissioner to request that you will be pleased to transmit at your earliest convenience, a schedule of prices upon which the extra works at the new Parliament buildings should, in your opinion, be returned and paid for in the progress estimates."

Letter of Secretary.

The reply of Messrs. Fuller & Jones, Architects for the Parliamentary building, to this letter, is as follows, dated March 30th, 1860:—"In answer to your communication of the 23rd instant, we have the honour to lay before you the three following prices fixed upon for extra work on the Parliament building, and at the same time beg leave to state that it is impossible to fix with any degere of accuracy a complete schedule of prices until the works are further advanced. Excavation in rock not exceeding 5 feet in depth, $1.25. Excavation in rock below 5 feet in depth, $1.90. Masonry in foundations and backing, $8.00 per toisse."

Reply of Messrs. Fuller & Jones.

Prices suggested by them.

A note on the back of this letter, signed S. Keefer, 17th April, 1860, states: "After seeing the work, and discussing the prices with the architects and clerks of works, I have agreed to these prices as fair and just for the extra work, and the estimates will in future be made at these prices." Another note on the back of the same letter, in the handwriting of the Hon. Mr. Rose, the Commissioner, and signed with his initials, contains the word "approved."

Mr. Keefer approves of these prices.

Note of Hon Mr. Rose approving.

The circumstance of the Hon. Mr. Rose marking with his initials the approval* of these prices, before any extra work was returned to the Department, seems fairly to establish that the Commissioner himself approved of prices which were other than those in the schedule attached to the contract, and so in fact sanctioning the dispensing with these prices according to the agreement with Mr. McGreevy as alleged by Mr. Keefer.†

The reply of Messrs. Stent & Laver, architects of the Departmental buildings, to the same letter of the Department, of the 23rd March, and of date the 14th of April, 1860, days:—

Messrs. Stent and Laver as to extra prices.

"Referring to your letter of the 23rd ult., we beg to inform you that we have conferred with the Deputy Commmissioner, S. Keefer, Esq., respecting extra prices for additional works at the new Departmental buildings, during his visit to Ottawa, this week."

"He (Mr. Keefer) approves of our suggestion to submit the prices for all extra work to a conference of the several architects, and requests that such prices shall in all cases, before being certified by us, be laid before the Commissioner, for his approval. These instructions we understood to apply to all the Public buildings in Ottawa."

* K. † K.

Correspondence points to agreement spoken of by Mr. Keefer.

This whole correspondence points clearly to the agreement spoken of by Mr. Keefer, and is vouched for by him as proof of it on the part of the Chief Commissioner.

Just after this correspondence, on receipt of the March estimate for 1860, the first in which extra work appeared, the Deputy Commissioner, on examining it, wrote these words on the margin: "Schedules of prices not to govern extra work, to be allowed for at fair, current rates."*

Memorandum of Mr. Rubidge on progress estimates.

On this same estimate for March, Mr. Rubidge, assistant engineer and architect to the Department, wrote the words: "No schedule prices given: the rates being determined by the local judgment and experience of the resident architects and clerks of works, and are taken to be fair and just."† And thenceforward the extra work was paid for at rates exceeding the contract prices. Up to this time all work beyond the contract was classed as extra work.

Contractors allowed advances on stone they had quarried as rubble stone delivered for buildings.

An extraordinary feature in the management, so far as rock excavation is concerned, is the total disregard to economy with which the work was conducted. So soon as the rock was taken from the excavation in the Parliamentary and eastern Departmental buildings, it was estimated by Mr. Morris as rubble stone delivered by the contractor for the work, at the rate of 87 cents for every 54 cubic feet, or $3.48 per quarry toise of 216 feet.‡ Two-thirds, as least, of the pickfaced masonry in the ducts and drains of these buildings it composed of the rock thus excavated, and a very large portion of the rubble masonry in the drains, ducts and foundations was constructed of rock from the excavations.§

Without remark or remonstrance.

The contractors were allowed advances upon it, in the monthly estimates as for quarry stone delivered by them, and were permitted to use it for rubble masonry and picked-faced stone-work as if it had been theirs, of right, without any remark or remonstrance whatever, being made by the Department.‖ The estimates for all the buildings show that over 40,000 yards of rock were excavated; this would, after allowing for waste, be equal to 3,000 toise, and would construct 9,000 toise of masonry of 54 feet, which was the measure adopted, as the contract recognized 54 feet as the toise.¶ In Toronto a toise** of rubble masonry is 54 cubic feet; when this rule is adopted, the cubic contents of the wall in feet, including half openings, are measured and reduced to the toise. In Ottawa†† and Kingston‡‡ the toise is 62 feet, but walls less than two feet thick, are measured as two feet, and openings under ten feet are not deducted.§§ In Montreal the toise is 72 French feet, usually estimated at 86 English feet, being really $86\frac{80}{100}$ feet, and one half of all openings over ten feet wide, are deducted. The quarry toise of stone there is 216 French feet, or $260\frac{26}{100}$ English feet, cubic;‖‖ but in Upper Canada it is 216 English feet. The toise is a French measure for quarry stone. It is a rough pile measuring 6 feet long, 6 feet high, and 6 feet wide,—but the toise of masonry is 72 cubic feet, French. The fact of the difference between the French and English foot not being understood, or its being disregarded, accounts for the 72 English feet being the measure in Ottawa, and 86 English feet in Montreal. If the Toronto toise be used it should be so as there understood, but the rubble masonry for the progress estimates was measured by the toise of 54 feet, but walls less than two feet thick were measured as two feet.¶¶

Quarry toise.

Different modes of applying it.

---

* K. † Ru. ‡ Mo. § Ste. ‖ See P. E. ¶ See Cn., P. E.

** G. †† Ste. F. Bo. ‡‡ Co. §§ T. ‖‖ T. Ste. Co. ¶¶ Hu. Bo.

An item of great moment in the boiler houses, ducts and drains, is pick-faced ashlar stone-work. There was no written order ever given for this extra work. Mr. Fuller directed the work, and Mr. Morris carried it out as it is, in obedience to his directions.* For this work Mr. Garth's order is vouched, but Mr. Garth never had any right to dictate the class of work; and when it was said he did it, he was adapting his plans to the buildings, many months before his contract was signed.† He distinctly denies having dictated this class of work.‡ Much of the blame has been hitherto charged upon Mr. Garth, in regard to the construction of the air ducts and flues, but he was never heard in explanation till now. It was convenient at the time, to throw the blame on some one, and on him it was thrown. His plans and specifications required the air ducts and boiler houses to be brick work. Mr. Morris and the architects directed ashlar work, and in these boiler houses, ducts and drains, there is allowed, for ashlar work in the progress estimates, the enormous sum of $56.326.50,—in Mr. Killaly's estimate, the sum of $167,624.60, all unnecessary; part of the same work being rubble masonry, pointed with cement, which is admitted to be quite sufficient.§ In the construction of the boiler houses, so little care was taken, that a large amount of heavy ashlar was built under the stairs, and around the part where the boiler and smoke shaft are to be built, where the roughest rubble work would have been quite sufficient.‖ In the excavations of the main sewers for the Departmental buildings, so little care was taken, that the rock in the bottom was taken out to a width of 15 feet, to contain a drain 2 feet 6 inches wide. Credit is, however, claimed for using this for air ducts above the drain: but so little skill was used in the Departmental buildings that three ducts were built over the one, and two over the three, instead of two over the one and three over the two as was the natural, as well as the artificial order in which the excavation should have been shaped for them.¶ They should have been constructed in it thus,

Mr. Garth's order and denial.

Blame on him unjust.

Rubble masonry sufficient in ducts and boiler houses.

Rock in main sewer taken too deep and wide.

instead of as they are.

All the space between these ducts and drains and the excavation was built up with solid masonry, from the bottom to the height of the arches over the upper tier, instead of constructing the walls of a proper thickness, and ramming with earth and rubbish from the excavations, the spaces between them and the sides of the excavation.** The rock from these excavations lay near, and was used as before stated, as belonging to the contractor, and whether actually built as rubble masonry, or thrown in as concrete, it was all measured as rubble masonry!

Rock from excavations used for.

The actual cost of pick faced ashlar including materials does not exceed 30 cents per foot, face measure.†† In the progress estimates the contractors were allowed 41 cents per foot, face measurement.‡‡ In Mr. Killaly's estimate face, bed and joint measurement were allowed, being equal to about $1.34 per foot. It is more than doubtful whether any advantage will be gained

* Mo, F. ** Pl † Mo. ‡ Ga. †† Ste. Hu. § Ga. ‖ Ga. Mo. ‡‡ See P. E. ¶ St. Pl.

Their utility doubtful.

by these ducts, more than if shafts had been used close to the buildings. But whether long ducts or shafts were used there was no need for either, beyond the buildings, till they had advanced towards completion, and their necessity and mode of construction had been well and maturely considered. In regard to the main sewer with ducts over it, from the eastern Departmental buildings, it was carried in a north easterly direction, a distance of 385 feet to the ravine, while the direct course only 177 feet, for which little better reason is given, than that Mr. Garth wishd the entrance to be in a northerly direction, and that some part of it would be available for other drains and ducts, which could be made to lead into it.*

Expenditure had become alarming in the end of year 1860.

Towards the close of the year 1860, the expenditure had been so alarming, that in the end of December, Mr. Page was sent to report upon the works, and he remained till March, 1861, but had little opportunity of judging, excepting through the representations of the architects.† The walls had been covered up, and the snow was deep all the winter. His report, to which reference is here made, shows the data upon which he made it, and how the prices for extra works were agreed to by him, on the suggestion of the architects, and the showing of the contractors. It enabled the Department to commence the work in the spring under better arrangements and supervision.

Mr. Bowes comes in June, 1861.

When Mr. Bowes assumed the duties of measurer for the Parliament building about the second or third day of June, 1861,‡ he measured by the same mode, which had been used from the commencement of the buildings, which as regarded the rubble masonry, was that it should be measured by the toise of 54 feet, deducting the openings, but after the appointment of the Hon. Mr. Cauchon, and on the 14th August, 1861, he received the following letter from the Department of Public Works:—§

Mr. Cauchon's directions in August, 1861, to Mr. Bowes.

"With reference to the measurement of work done, and materials delivered at the Parliament building, Ottawa, I am directed by the Hon. the Commissioner to state that inasmuch as the parties tendering were not informed what system or usage of measurement would be followed in reference to these buildings, the contractors must naturally have presumed that they were to adopt a mode in usage in the locality where the buildings were to be erected, and without doubt have based their calculations on the modes referred to. I am therefore directed to instruct you to measure the work doneand to be done, and the materials delivered for the building you are now engaged on according to the usuages and customs in force in Ottawa. I am farther to request you to take special care with regard to the contract work, that the *pro rata* rates in the progress estimates are in fair proportion to the bulk sum named in the contract. I have also to instruct you to transmit in future the estimates direct to this office as soon as they are prepared."

Custom in Ottawa applied.

The custom in Ottawa was, not to deduct openings under ten feet, taking 72 feet as toise, and from this time until he had new instructions from Mr. Killaly, Mr. Bowes did not deduct openings, but still used the Toronto toise of 54 feet, by which half openings are deducted. ‖ Up to the month of August, the Nepean facing was measured to the chamfer of the jambs only. After that time the whole of the openings were measured as if they had been faced with Nepean stone.¶ Upon what principle this change was made, the Commissioners cannot understand.

By the contract Ottawa limestone was to be used. By the arrangement already mentioned, about which as regarded the Parliament building there was

* Hu † P.. ‡ Bo § Bo. ‖ Bo. ¶ Bo.

no dispute, Nepean stone was to be used instead of limestone, and the price of substitution of the one for the other was to be 21 cents per foot * Those portions only, of the walls where Nepean stone had taken the place of limestone ought to have been measured and allowed for, at the rate agreed, and nothing more. The difference allowed between the two seems ample, and at all events had been fully agreed upon, as before stated expressly by Mr. McGreevy, and by Messrs. Jones, Haycock & Co., by acquiesence with the Order in Council.

Explanation of the substitution of Nepean for limestone.

From the commencement of the works in the spring of 1861, until they were abruptly suspended in the end of September, they had been carried on, under better regulations and supervision than in the year 1860, and great progress had been made during that year, especially with the Departmental buildings.

Works carried on in 1861, under better supervision.

At the time of the resignation of the Hon. Mr. Rose in June, 1861, there was on hand of the original appropriation $327,986.75, and to this sum was added two amounts of $100,000 each on the 23rd day of September and 19th day of November, by Orders in Council, of these dates respectively.† The progress estimates had been regularly paid, and embraced all the work done from month to month, and so continued till the month of August inclusive.‡ The whole works were going on, and there was money sufficient to carry them on at their ordinary progress, to the end of the building season.§

Estimates paid till end of August, 1861.

The Hon. Mr. Rose had been succeeded by the Hon. Mr. Cauchon, who not being on terms with the Deputy Commissioner, did not consult him,|| or any competent officer of the Department, and who, unfortunately for the public interests, not satisfied with paying the monthly estimates, as had been the practice from the commencement, of his own authority, and without the ordinary or usual vouchers, paid Mr. McGreevy on the 11th September, 1861, the sum of.....

Hon. Mr. Cauchon succeeds Hon. Mr. Rose, —never consults Deputy Commissioner, or other competent officer.

On the 8th of October, 1861.....	$40,000
On the 19th October, "	40,000
On the 20th November, "	10,000
And to Jones, Haycock & Co.:—	45,000
On the 1st August, 1861, the sum of.....	
On the 24th August, "	$10,000
On the 11th September, "	40,000
On the 9th October, "	23,700
On the 28th " "	30,000
On the 20th November, "	10,000
On the 13th May, 1862, "	45,000
	2,000
Making a total sum of.....	$295,700

How much he expended.

of which $135,000 was paid to the contractor for the Parliamentary building between the 11th September and the 20th day of November, 1861, and $158,-000 to the contractors for the Departmental buildings between the 1st August, 1861, and the 20th November, a further sum of $2,000 being again advanced to them on the 13th May, 1862.¶

The amount paid to the contractors previous to the above advances by the Hon. Mr. Cauchon was $738,855.49,** making a grand total paid on all the buildings up to the stoppage of the work, on the 1st October, 1861, of

§ K. * Mo. ¶ O. † K. ‡ K. ** P. E. || K. C.

Without apparent cause, suspended works.

$1,034,555.49. On the 27th September, six days after having sent the Hon. H. H. Killaly with instructions, which will immediately appear, he ordered the works on the respective buildings to be suspended, because the appropriation had been exhausted. In fact so far as it appears, he had without necessity exhausted the appropriation, and immediately assigned this circumstance, as good cause for suspending the works.*

On the 21st September, 1861, the following letter was addressed to the Hon. Mr. Killaly by the Secretary of the Department of Public Works :—

Letter to the Hon. Mr. Killaly.

" I am directed by the Honorable the Commissioner, to request that you will make it convenient to proceed to Ottawa with the least possible delay.

" The sum appropriated by the Legislature towards the erection of the Parliamentary and Departmental Buildings, and of a residence for his Excellency the Governor General, is now exhausted, and the honorable the Commissioner is most anxious that arrangements should be made with the view of closing the works for the winter as soon as possible, consistent with their being put into a state of security against frost, &c. The Commissioner, on his coming into his present office, found the plans of those buildings had been decided upon, the contracts entered into, and considerable progress made with the works, and in the preparation of materials of all kinds. In view of the magnitude of these works, and the great outlay they involve, he at once devoted a large portion of his time to acquire such a knowledge of the details connected with the previous payments, the state of the works, &c., &c., as would enable him to form some idea how they stood with regard to completion, &c.; but before it was possible for him to acquire this information the appropriation was all but exhausted. The Commissioner very soon discovered that an extraordinary large proportion of the amount already paid has been for additional work extraneous of that shown and described in the plans and specifications and embraced in the original contracts; that of such additional work, no previous estimates or measurements had been made nor quantities ascertained. These quantities seemed to vary every day, and no prices or mode of measurement had been agreed on. Great discontent exists on the part of the contractors in consequence, who complain that a large sum to which they are entitled is held back from them, to their great injury and embarrassment in the carrying on of their work, and they represent that the returns of the architects did not, and do not, truly show the state of the work, the contract and additional work being so mixed up together that it is not possible from these returns to make out in the office the true state of the accounts—a fact as unfair and embarassing to the Commissioner as it is unjust to the contractors. In their opinion, this has been done with the view of hiding the great outlay on work not embraced in the plans and specifications, which should have been foreseen and provided for by the architects.

" Under the circumstances, the Commissioner is of opinion that it is absolutely necessary to refer the matter generally to some qualified and impartial person, and as he understands you have practised as an architect as well as a civil engineer, and have not been connected with the works in question, he is very desirous that you should undertake the investigation of the whole case, keeping the following points in view :—

" Firstly,—What arrangement can be at once made to suspend the work, in order to reduce to the utmost the amount to be expended on the responsi-

* C

bility of the Government, until the whole subject can be submitted to the Legislature.

"Secondly,—To ascertain the amount that will be required to pay for work and material already done and provided, in order to enable the contractors to pay off and discharge their mechanics and labourers.

"Also, what expenditure will be strictly required to protect the works in their present unfinished state against the effects of the coming winter.

"Thirdly,—To make such investigation, and have such measurements made, as will enable you to distinguish clearly the additional work from that embraced in the contract.

"To establish reasonable prices at which the former should be paid.

"Fourthly,—To ascertain and report, for the information of the Commissioner, what portions of the work might, in your judgment, be allowed to lie over; and also, at what time it is probable the completion of the buildings, respectively (so far as to permit their occupancy), may safely be calculated upon, and whether it might be advisable to extend that period without interfering with the arrangements contemplated.

"After duly and carefully examining into all these important details, you will be pleased to prepare and transmit a report thereon to the Commissioner, who will then be prepared, without loss of time, to have a final decision arrived at on the subject."

On the same day that the above letter was written to the Hon. Mr. Killaly, the following was sent to Mr. Bowes, measurer for the Parliamentary buildings:—

"I am directed by the Honorable the Commissioner, to inform you that the Hon. Mr. Killaly has been directed to make a thorough investigation into, and report upon, the state and progress of the works at Ottawa, past and present, and upon all details whatsoever connected therewith, with a view of determining the prices, and the mode of measurement to govern the settlement with the contractors."

"Mr. Killaly may be expected in Ottawa in the early part of next week. In the meantime, you will exert yourselves, and endeavour to have all measurements of work and material closed up to the present month. You will also afford Mr. Killaly in the course of his investigation, every possible assistance, and information he may require, upon all matters connected therewith."

These instructions did not contemplate settlement with contractors for stoppage.

These instructions to the Hon. Mr. Killaly, did not contemplate the settlement of the contractors claims for the stoppage of the works, but immediately after he received them, he was informed that the contractors had received orders to discontinue the work in toto. In his report of the 12th November, 1861, he informs the Department of the course he intends to adopt, with reference to rates, upon which the contractors should be paid, for all work, not originally contemplated, or included in the contract, and that these rates should be applicable to all such work already performed, or remaining to be done to complete the whole.

Does not appear to have [illegible] by [illegible] work.

This so far as it appears, was passed in silence by the Department, leaving him to infer, that, what he proposed to do, was assented to, and became part of his original instructions. It is to be regretted, that it did not occur to him, that the settlement of what were fair prices for the work done, or to be done was the one thing and the damages which the contractors claimed by reason of the stoppage of the works another, and that they had no necessary connection with each other. It was proper to show what fair prices were, as well as what was a fair compensation for an alleged injury, so long as it was understood that the damages had nothing to do with the actual prices of the work. The mere contract work could never have been done for the sum for which it was taken. What enabled the contractors to proceed at all, was the extraordinary quantity of extra and additional work, and the extraordinary prices that had been allowed upon it, previous to his coming.* To have stopped this extra work would have effectually stopped the contract work also, and it is difficult to see on what principle damages were expected for contract work, admitted to have been taken ruinously low, or for stopping extra work, which the Government had not bound itself to have done. In any event the quantity of work done and its value were totally unconnected with damages real or imaginary for the stoppage of the work, but Mr. Killaly appears to have based his *mode* of measurement and *prices* for the past and future works, and to have justified them on the ground that they included or rather precluded all claim for damages for the stoppage of the work. The whole arrangement made by him was virtually a new contract for the extra and additional work, which had been done, and was to be done at rates perfectly satisfactory to the contractors, but alike irreconcilable with fair prices, or the schedule prices attached to the contract,† the schedule of prices put in, in the first instance by Mr. McGreevy, and rejected as not representing the contract, or the prices which the architect, Mr. Page, and the Department had considered fair and equitable while the works were in progress.‡

Extra work was what enabled contractors to go on at all.

Hon. Mr. Killaly justifies his mode of measurement and prices.

His mode of measurement made comparison difficult.

If the mode of measurement had been contiuued which had existed from the commencement, and increased *prices* fixed as remunerative, the comparison between the rejected schedule of prices originally put in by Mr. Greevy, the schedule of prices attached to the contract, and those from time to time allowed as the works proceeded, would have been easy. To exhibit the comparative ratio between those prices and these allowed by Mr. Killaly, has caused much delay in the progress of this commission, but without such a comparative statement, the true position of the matter could never have been arrived at.

Between the time the Hon. Mr. Killaly received his instructions, and the 30th September, he had, as he says, after full consideration, decided upon the principles of measurement for works of the Departmental buildings, which were also to govern those of the Parliamentary building, as stated in the following letter of instructions sent by him to Mr. Bowes§ :—

His letter to Mr. Bowes.

"As it is of the greatest importance that the full measurements of all the work in the Parliament buildings executed up to the 1st of October next, be made and ready by the same time as those of the Departmental buildings, I have to request that you will at once proceed to make them. In so doing, you will be governed by the following principles in classifying the work :—

* P. E. † St. ‡ See P. E. § Bo.

"1st. *Contract Work.*—That is to say, all work done, and materials delivered for work strictly coming under the original contract, and wherein no deviations or additions have been made from or to the plans and specifications.

"2nd. *Extras.*—That is to say, such work and materials delivered for work coming under the head of contract work, but in which changes or additions have been made either in the position, style, or class of materials from that shown or specified. Extra.

"3rd. *Additional Work.*—That is to say, all work, labor, and materials not included in the original plans and specifications. The principles of measurement agreed to and decided upon, after full consideration, for work of the Departmental buildings, are those which of course must govern the measurement of work of the Parliamentary building, and they are as follows:— Additional.

"1st. Masonry to be measured solid, including cut-stone, and no openings to be deducted.

"2nd. Nepean facing to be measured upon the whole of the external superficies of the walls of the building.

"3rd. Brick work to be measured 20 bricks to the cubic foot. All flues per foot lineal, and all splayed and arched work, per foot superficial in addition.

"4th. Cut-stone by English rule of measurement; that is to say:—

"1st. To be cubed to external dimensions before cutting.

"2nd. Plain face labor to cover, in addition to the face, one bed and joint.

"3rd. Sunk and moulded work to be measured, in addition to the vious, by girth-ing, wherever it occurs. Pre-

"As the works have been now stopped, I have requested Mr. Larose to unite with and aid you in making up the measurements."

On the 24th October, 1861, Mr. Bowes had the following letter from Mr. Killaly*:—

The schedule is as follows:—

"I enclose you a schedule, showing the rates agreed on for the additional works performed by the contractor for the Parliament buildings; you will be guided by it in making up your return. The rates for material delivered you will regulate in due proportion to the prices of the work for which they are provided, fixing those of material for contract work according to contract prices, and for additional work, by the rates in the schedule.

* Bo.

The schedule is as follows:—

No.	Denomination.	Description.	Progress Estimates.	Claimed.	Allowed.
1—	Cubic yd...	Rock excavation in building to 5 ft. deep	1.25	2.25	2.00
2—	" ...	" extra depth for heating and Ventilation from 5 to10 feet deep...	1.90	3 60	3.00
3—	" ...	" " " 10 to 15.	2.25	5.00	4.25
4—	" ...	" " " 15 to 20.....	.....	6.00	6.00
5—	" ...	" in ducts and drains, forheating and ventilating, to 5 feet deep.....	1.90	3.25	2.00
6—	" ...	" 5 to 10 feet deep.....	2.25	4.50	3.00
7—	" ...	" 10 to 15 "	3.50	8.00	4.25
8—	" ...	" 15 to 20 "	5.10	9.00	6.00
9—	"	...Earth excavat'n, extra depth to reach rock	0.40	0.75	0.55
10—	"	...Filling to walls, levelling and ramming..	0.35	0.80	0.75
11—	"	...Masonry in angle towers, additional foundations, thickening to walls in boiler-house, &c., &c.,.....	4.00	7.50	6.50
12—	Ft. Supl.,...	Pick-faced work in ducts and drains...	0.41	0.85	0.41
13—	" ...	" " in boiler-house.....	0.90		0.41
14—	"	...Picked face in arches to ducts	1.25 to 1.75	1.75	1.50
15—	" ...	" " to drains.			
16—	Per mill.,...	Brick-work in walls.....	13.50	16.10	13.80
17—	Per ft. supl.,...	Arches, segmental and circular....		0.20	0.20
18—	Per ft., lineal...	Flues.....	0.07	0.12½	0.25
19—	Per ft. supl.,...	Nepean facing.....	0.21	0.55	0.50
20—	" "	...Flagging, 3-inch and under..0.07 to	0.38	0.45	0.25
21—	" " ...	" 3-inch to 6-inch....0.07 to	0.38	0.45	0.30
22—	" " ...	" over 6-in., to be measured as block.....			
23—	" "	...Potsdam stone in relieving arches...		0.90	0.90
24—	Per ft., cubic...	Ohio stone.....	0.75	1.40	1.25
25—	" "	...Nepean stone.....		1.40	1.25
26—	Ft. sup....	Plain face on Ohio stone.....	0.28	0.45	0.40
27—	"	...Sunk " "	0.42	0.75	0.60
28—	"	...Circular " "	0.56	0.90	0.64
29—	"	...Moulded and sunk works, Ohio stone	0.40	0.65	0.60
30—	" ...	" and circular " "	0.62	1.00	0.90
31—	Miters	...Allow a foot for each, price according to classification.			
32—	Ft. cube...	Brockville stone.....	0.52	0.80	0.80
33—	Ft. sup.,...	Labor on do. 50 per cent more than Ohio.			
34—	Ft. cube...	Blue sandstone for steps and landings		1.40	1.25
35—	Yd. sup.,...	Concrete in bottom of drains and ducts one foot thick.....		2.00	2.00
36—	Yd. sup.,...	Do. for floors		3.00	3.00
37—	Per ton ...	Rolled iron joists.....		160.00	140.00
38—	"	...Rivetted plate girders.....		240.00	220.00
39—	Ft. cube ...	Marble.....		2.50	2,00
40—	Ft. sup.,...	Labor on do. plain faced.....		3.00	2.50
41—	" ...	" " circular.....		3.75	3.50
42—	"	...Centreing, measuring all arch.....	0.20	0.35	0.20
43—	Per lb., ...	Ornamental iron work in castings and terminals.....			0.50
44—	Ft. sup.,...	Doors (additional) on basement floor.			0.70
45—	" ...	" above basement.....			0.7 5

gross mates.	Claimed.	Allowed.
.25	2.25	2.00
.90	3 60	3.00
.25	5.00	4.25
....	6.00	6.00
.90	3.25	2.00
.25	4.50	3.00
.50	8.00	4.25
.10	9.00	6.00
.40	0.75	0.55
.35	0.80	0.75
00	7.50	6.50
41 } 90 }	0.85	0.41 / 0.41
75	1.75	1.50
50	16.10	13.80
	0.20	0.20
07	0.12½	0.25
21	0.55	0.50
38	0.45	0.25
38	0.45	0.30
	0.90	0.90
75	1.40	1.25
	1.40	1.25
28	0.45	0.40
42	0.75	0.60
56	0.90	0.64
40	0.65	0.60
32	1.00	0.90
52	0.80	0.80
	1.40	1.25
	2.00	2.00
	3.00	3.00
	160.00	140.00
	240.00	220.00
	2.50	2,00
	3.00	2.50
	3.75	3.50
0	0.35	0.20
		0.50
		0.70
		0.7
		5

No.	Denomination.	Description.	Progress Estimates.	Claimed.	Allowed.
46—	Each	...Additional windows in basement of angle towers, sashes and frames complete, not glazed.....			12.50
47—		Additional windows in other parts of basement, large, with double shades.....			20.00
48—	Each	...Additional windows on ground and first floors, none.			
49—	Each	...Altered windows on ground and first floors, none.			
50—	Ft. sup.	..Architraves 6 ⋈ 2, with 2½ roll basement.....			0.20
51—	P. square	...2-in. white pine flooring laid, including strips in concrete.....			7.50
52—	P. square	...1½-in. do, do, do.....			5.75
53—	Per lb.,	...Plumber lead work.....			0.25
54—	P. square	...Slating, including copper nails and battens.....			11.50
55—	Per lb.,	...Iron bolts and straps fixed.....			0.15
56—	M.B M.	...Labor and timber in roof concealed (framed).....			30.00
57—	P. yd. sup	...Plastering, best class, hard finish...			.40
58—		...Oak wrought and fixed (not settled)			
59—		...Pine " " "			
60—	P. ft. sup	...Cement moulded skirtings, including mitres.....			0.56
61—	"	...Plain plaster cornice.....			0.30
62—	Per lb.,	...Ornamental cast iron.....			0.08
63—	Yd. sup.,	...Painting 4 coats in oil.....			0.30
64—	"	...External iron work in picked colors			0.40
65—	"	...Asphaltum staining, 2 coats.....			0.18
66—	"	...Oak graining.....			0.35
67—	In. sup.,	...Gilding.....			0.04
68—	Yd. sup,	...Cement floors, 1½-in.,.....			
69—	"	...Extra labor on sandstone quoins...			0.75
70—		Alterations in saloons to be settled by deducting work not done at schedule prices, allowing the extra rate for work substituted.	To be settled by Measurer.		
71—		Claim for cut-stone in piers in basement. The architects admit this as far as under the houses below contract level,—quantities to be ascertained and entered as similar work..... ...	To be settled by Measurer.		
72—		Claim for 7 iron built girders to carry walls, and required when the additional fire-proofing was adapted ascertain weight and rate as similar work.....	£55 per ton		
73—	Claim for	extra labor on Brockville stone in windows of basement, plinth, &c. The stone was procured by the contractors, considering it cheaper; finding the difficulty of working it, they abandoned it. No allowance.			

74—Claim for difference between oak and pine sills to all sashes throughout the building; settled by assuming oak and workmanship at 85 cents a supl. foot, and deduct value of pine sills.	To besettled by Measurer.

(Signed,) H. H. KILLALY.

The difference between the prices allowed in this list, and those used for the progress estimates, will not appear by mere inspection, but by considering also the increased quantity of work which Mr. Killaly's mode of measurement gave, and to which his prices were applied.

For example, pick-faced work in ducts and drains, had been allowed for by the architects at 41 cents per foot, measured on the face only, but Mr. Killaly added a bed and a joint, so that 51,000 feet face, became 164,000 feet, for all of which the price of 41 cents was given.

The masonry in the ducts and drains, roughly measured as solid work, became 8,744 yards, instead of 4,643 yards, the actual quantity.

Mr. Killaly's opinion as to Department being liable to contractors.

Mr. Killaly, as he states in his report, considering in his judgment the Department liable to the contractors for the amount of such losses as they could establish, the extent of which he doubts not would be considerable, but into which he did not separately enquire, caused him to fix on equitable rates, which should be applicable to work already performed, and to be performed, so as to induce the contractor to waive all claims whatever caused by the suspension of the work. In determining these rates, he appears to have received the statements of the respective contractors, and then to have consulted Mr. Stent,* one of the architects of the Departmental buildings, in reference to them, who in explaining the apparent inconsistency of his conduct in reference to the prices stated by himself and his partner to have been fair and equitable, while the works were in progress, and the prices allowed by him in the estimate of Mr. Killaly, and in explaining the part he took in the settlement made by Mr. Killaly, says†: "We considered Mr. Killaly a special commissioner with special powers. We understood from him that he had come to settle disputed points between the contractors and ourselves, and that he was also entrusted to deal with the question of compensation to the contractors for a breach of their contract on the part of the Government, and that he was authorized to enter into the question of compensation to them. The contractors submitted to him their complaints and grievances in respect of the work; he requested us to meet him at his office, and we did; he proposed to get Mr. Pattison, accompanied by some person on the part of the contracters, to measure the work on a mode of measurement which had been adapted conjointly, and upon which we were consulted.

Mr. Stent explains his apparent inconsistency, in regard to former and Mr. Killaly's prices.

We understood the measurement was made in accordance with this mode, but we had nothing to do with it or with the measurements, from June, 1861. We went over the claim of prices for the work, as made by the contractors; many of these prices we objected to, and they were reduced, and some rejected a together. Those reduced, were so, to the amount mentioned in his report. If we had been consulted as to the settlement, we should have said, measure and value of the whole work, was the fair mode, at the prices we had

* St. † St.

been chiefly accustomed to use, and which we settled with Mr. Page. We considered measurement and value as the fair mode, because the contract had been lost in the amount of extra and additional work. Mr. Killaly thought it would be better to give compensation to the contractors, in the increased price for their work and materials. He decided it on his mode of settlement. Messrs. Jones, Haycock & Co., put in the prices they claimed, what was allowed was put by the side of their claim, as an equitable compromise. He got all the information he could from us, and from the contractors, as to the value of labor and material. He made the estimate and value of the work done, and to be done on his own judgment, and when his estimate was made, he requested us to sign it, and the measurer also."

The heading states that that estimate is based upon the rates of prices, and the principles of measurement for past and future work, arrived at, and approved by Mr. Killaly. We signed that estimate, certifying it to be a correct statement of the amount of material in the building, and that the gross amount carried out, from the data given, is correct We do not assume the responsibility of its being correct in detail, nor can we assume the responsibility of saying what is due the contractors for damages, for breach of contract on the part of the Government. We assume that the measurements are correct on the principles Mr. Killaly laid down, but we do not assent to some of the items of his prices. We do not certify to the measurement, for we never measured the work while in progress, or afterwards. We only took the measurement as correct, by Pattison, on Mr. Killaly's principles.—I consider the measuring of beds and joints as the only true mode of measuring masonry: that is the universal practice in England, and in my own practice, but I object to measuring openings in face work. The local custom is not to measure beds and joints. In our letter to the Department, we stated that we thought this the fair way, but we knew it was contrary to the rules of the Department, the local custom in this place, and the custom in the Province. I considered the prices fixed by Mr. Killaly in excess of prices allowed under ordinary circumstances. The question of the prices allowed, by Mr. Killaly, as the mode of compromise for damages, was what I considered out of the ordinary course." *

In his evidence, given before the Commission, Mr. Fuller, one of the architects for the Parliamentary building, states:—

"When Mr. Killaly came, we considered he had the supreme authority to fix and determine everything."†

Mr. Fuller's evidence in explanation of his conduct in signing that estimate.

"We only signed his estimate as a matter of form, without any responsibility whatever. As we understood it, the progress estimates of work done and materials delivered for the Parliament building, to the 1st October, 1861, was based upon the rates of prices and principles of measurement, for past and future works, arrived at and approved by the Hon. H. H. Killaly and Thomas McGreevy, as the heading of it shows.

"I gave my opinion once, on being asked, but I and my partner took no responsibility in it. It bears at the end of it our certificate as to its correctness, but we only certified it as based upon the principles and terms stated in its heading, and not as to the correctnessof the prices. I understood these prices were settled as a compromise which he had full power to make.

"I do not recollect any direct request, from Mr. Killaly, that I should sign this estimate, but I recollect saying to him: I can have no objection to

* See the evidence of Mr. Stent, in further explanation.

† F.

sign it when, by its heading, you assume the principles and rates upon which it is based, and I say now that it was upon his desire, in some way expressed, though I cannot now remember the distinct terms of it. I did sign it.

"My estimate of the amount required to finish the buildings, stated in Mr. Killaly's report, is based upon his prices and mode of measurement, not upon any estimate of my own.

"I cannot say how much it is in excess of the contract prices, or of the prices we settled with Mr. Page, and I have never made any estimate as to what it will take to finish the buildings. I should not like to venture even a guess estimate, a positive estimate would take months to make. Those of Mr. Killaly are but approximate estimates."

Mistakes of Mr Killaly suggested in regard to openings.

Referring to these principles of measurement, it is submitted that Mr. Killaly was mistaken in directing masonry to be measured solid in the ducts and drains.

Measurement of Nepean facing.

The face beds and joints of the pick faced stone in them were measured, and then the whole was measured as a solid mass of rubble masonry, when in fact they were composed of bottom sides and top.* To treat the openings in these as the openings in the face of a wall seems unreasonable. He was mistaken too in directing the Nepean facing to be measured upon the whole of the external superficies of the walls of the building, † for as it has been shown, Nepean stone was a substitution for blue limestone where this would otherwise have been used. This circumstance being overlooked, may have led to the mistake.

Mistake in bricks.

In bed and joint.

He was mistaken also in allowing 20 bricks to the cubic foot, for there are only 20 bricks in the superficial foot of a 1½ brick wall, and lastly he was mistaken in applying the English mode of measurement when it was not used or relied on, and in directing one bed and one joint in addition to the face to be measured on cut stone.

Errors in allowances of Mr. Killaly.

Items Nos. 62 of Eastern Departmental buildings, and 63 of Western, wrong.

In this Province and in the United States, the face only of worked stone is measured, and although it is true that where beds and joints are measured, as in England, the price per foot is less, yet that fixed by Mr. Killaly was greatly in excess of what had been considered, and was in fact fair and equitable. Besides the differences which appear between the value of the work done in the estimates of Mr. Killaly, on his own principles of measurement and rates of prices, and those adopted by the Commission, there are errors and allowances, which it is submitted ought not to have been made. In items Nos 62 of the Eastern Departmental building, and 63 of the Western Departmental building, he erroneously carried out the extra brick-work in all the external walls in which there were contract and extra work together, in such a manner that all such walls were rated extra thus, in item 62, of the eastern Departmental building, brick laid in thickened walls, and in additions per M.:

How wrong in East Departmental building.

1,941,381 bricks at $13.80	$ 26,791.05
Contract, 957,360 bricks at $6.30	6,031.36
	$ 20,759.69

* Bo. † Bo.

Now it should have been bricks in thickened walls and additions, 1,941,381, bricks of which there are 957,360 of contract work, giving 984,021 extra brick, at $13.80.....$ 13,579.48

Error in favour of contractor.....$ 7,180.21 **Error.**

for the eastern block, and in the same way in item 63 of the western block there are returned brick in thickened walls and additions :

1,674,110 bricks, at $13.80 per M.....$ 23,102.71

Contract, 753,060, at $6 30..... 4,744.27 **How in West**

$ 18,358.44

It should have been brick in thickened walls and additions, 1,674,110 bricks, of which there are 753,060 bricks of contract work, giving 921,050 extra brick at $13.80.....$ 12,710.49

Error in favour of contractor..... 5,647.95 * **Error.**

The errors amount to..... 12,828.16

and consist as is evident in not deducting the quantities from each other to ascertain the number of extra bricks before extending the prices.

Another error of $8,500 in the three buildings, is in the item of scaffolding, numbers 91 and 86 of the Departmental buildings. **Scaffolding erroneously allowed.**

It is said the contractors intended to have had the scaffolding inside, and to have built the external walls overhand ; but it appears such work cannot be properly done in this way, and that scaffolding of the kind used was required in carrying out the contract, and should not have been allowed. Mr. Stent says it should not have been allowed as extra,† but he signed Mr. Killaly's estimate allowing it.‡ There is no allowance for scaffolding in the Parliamentary building, for the specification was explicit on this point.

In reference to the architects for the Departmental buildings, two items for extra work, Nos 33 and 34 of Mr. Killaly's estimate for both the Departmental buildings, deserves special notice, as they involve an amount of $15,030.74. **Error in specification of Departmental buildings in reference to quoins.**

"These are Ohio stone quoins extra from limestone," and the Commissioners concur in the view that they are extra taken by Mr. Killaly. The specifications were stated, as has been mentioned by the architects, to have been so well considered that it was not anticipated any extras would arise. §

In the specification for the Departmental buildings it is said, "all the stones used in the buildings, except otherwise described, are to be the blue limestone of the district carefully selected," and again "quoins in all cases to bed in the walls at least 9 inches, to be in no case less than 15 inches long and 9 inches wide, to rise in irregular heights, and have random back joints ;" and again, "the whole of the sandstone dressings, including pinths, window and door joints, heads and mullions, tracery, string courses, eaves course, finials, buttress caps, and slopes, parapets, chimney shafts, caps and mouldings, and otherwise on the external fronts." Quoins, however, are not mentioned ; and when they were not, blue limestone was to be used ‖ It had thus become a question with the contractors whether they were bound on a fair construction of these clauses, to make the quoins of Ohio stone, but having so made them, they claimed it as an extra. ¶ **A question arose whether the contractors were bound to put Ohio stone in quoins.**

* Pt, † St, ‡ St, § F. and St. reports with original designs, ‖ Sp. ¶ St,

The architects had contended that the specification bound them to put in Ohio stone, and until Mr. Killaly came they had resisted it as an extra, and signed his estimate allowing for it $15,030.74 in the two Departmental buildings.

The allowance or disallowance of this sum made a difference to them for their per centage of $750.

Allowance of $1,781.40 to Mr. McGreevy for quoins, without any reason.

In the Parliament building the quoins are not better than those specified, "native" sandstone upon which there should have been no extra; but notwithstanding this a claim was made by Mr. McGreevy for extra labour on them, which Mr. Killaly acknowledges by allowing him for it the sum of $1,780.40.*

There having been in fact no measurements of the buildings, except what Mr. Killaly had caused to be made, on principles which the Commissioners could not adopt, it was deemed expedient to have them thoroughly measured, as well as all the plant and materials on the ground.

New measurement ordered.

For this purpose they appointed in the first instance, Mr. Gundry, an architect from Toronto; Mr. Leveque, an architect from Montreal; and subsequently, to expedite the work, Mr. Harper, a builder from Toronto.

With Mr. Gundry, they associated Mr. Bowes and Mr. Larose; with Mr. Leveque, Mr. Hutchison and Mr. Pattison; and with Mr. Harper, Mr. Pelham. Mr. Bowes had been measurer for the Department of Public Works, of the Parliament building, and had measured it from the time he came for the progress estimates, and for Mr. Killaly on the principles laid down by him.† Mr. Larose had been clerk of works on the same building.‡ Mr. Pattison had been measurer of the Departmental buildings, and had measured them from the time he came for the progress estimates || and for Mr. Killaly on the principles § he laid down, and Messrs. Hutchison & Pelham, had been clerks of works on the Departmental buildings. ¶ This mode of association was adopted, that no part of the work should be omitted, that one should check the other, and that data for a comparison should be afforded, of the present with the approximate measurements, and with that of Mr. Killaly. Before proceeding however, Mr. McGreevy was informed by letter on the 15th day of July, 1862, that Mr. Thomas Gundry, who had been engaged by the Commission to measure the work done upon the Parliament building, would begin that day at three o'clock, and the Commissioners considered it proper to advise him of the fact, in order that should he be so inclined, he could be with him during the measurement. The reply of Mr. McGreevy to this notice is dated the 17th July, and was as follows:—"I beg to acknowledge receipt of your letter of the 15th instant, and in reply would say, that the works constructed by me, and the materials delivered, have been already measured by the architects and measurers appointed by the Board of Works for that purpose, as certified in their estimates to the 1st October, 1861, bearing date of 12th March, 1862, of the correctness of which I am satisfied. I therefore do not consider it necessary to take any part in the new measurement now contemplated, as however, it is possible that the directions to the gentlemen appointed to this duty, may differ from the system pursued by the architects and officers of the Board of Works, who previously measured my works, and by whose decision I am bound, under the terms of my contract. I will feel much obliged, by your furnishing me with a copy of the instructions given to Mr. Gundry, in order that I may, if I think necessary,

Notice to contractors.

Reply of Mr. McGreevy.

* St. † Bo. ‡ L. Pt. || Pt. ¶ Pl. Hu.

call the attention of the Commission to any portion of them. I take this the earliest opportunity that has been afforded to me, to beg that as the enquiry which is now taking place has been instituted by the Government without reference to me, that you will be pleased to furnish me with a copy of your instructions as far as they relate to my works."

Reply of Messrs. Jones, Haycock & Co.

The reply of Messrs. Jones, Haycock & Co., to a like notice on the same day, apprizing them of the appointment of Mr. Leveque, is precisely to the same effect, and neither took any part in the measurements, for if the measurements of the Hon. Mr. Killaly, and the prices fixed by him, were to bind the Government, it was clear that the contractors would neither take part in the present measurement, nor submit any claim for damages for the suspension of the works.

The gentlemen to whom the measurements were committed, had written instructions on the 15th July, 1862, as follows :—" Excavation to be measured per cubic yard, masonry to be measured solid, and all deductions for openings of doors, windows, &c., to be recorded. Nepean facing to be measured on the face of the work, by a thickness of nine and ten inches. The openings of windows, doors, &c., the Ohio stone dressings, and the Potsdam stone arches to be separately recorded as deductions. The local stone for which the Nepean stone is substituted must be deducted. Brick work to be measured, 20 brick to the standard foot, of three bricks in thickness. All openings and fire places to be deducted to the spring of the arches, and recorded. Cut stone to be measured first for the cubical contents of the stone ; second, for the superficial labour on the visible face of the stone under the respective headings of rough bush hammered work, picked work, crandled work, fine bush hammered work, plain work, rubbed work, sunk work, moulded work, chamfered work, carved work, and the same heading of circular work ; this applies to the Ohio and Brockville stone. Potsdam arches to be measured per foot superficial on the face of the wall, at an average thickness to be ascertained. Carpenters, Joiners, Smith, Ironfounders, Slaters, and Plumbers'work, to be measured and classified according to the several headings, set forth in the schedules attached to the contracts of the respective buildings. The measurement to be entered in the measurement books under the respective headings therein contained, viz :— Total measurement of work as it now stands. Contract work, which is to include all classes of work included in the bulk sum of the contract. Extra work to make good deficiencies in the plans and specifications. Additional work, to embrace all works on foundations below contract lines, and work additional to contract plans. Works connected with heating and ventilation to be kept distinct from other works."

Bush hammered work.

Potsdam stone.

Measurement to be entered in the measurement books.

Farther instructions to measurers.

Farther written instructions to the measurers were given on the 19th September, as follows :

Work as it now is.

" First, To measure the various kinds of work in the buildings, as they are at present, entering the dimensions in the books and returning the quantities.

Contract work.

" Second, To measure the Buildings and ascertain the quantities of the various kinds of work done in accordance with the contract.

Extras.

" Third, To ascertain the various quantities of work that have been done extra to the contract, and return them under the different headings according to previous instructions, and the omissions from the contract.

Omissions.

" The dimensions of the above to be entered in the large books, as previously instructed.

Work to complete in present style.

"Fourth, To measure the various kinds of work required to complete the buildings in the present style and character of work, and return the quantities.

Work to complete according to contract.

"Fifth, To measure the various kinds of work required to complete the buildings according to contract, and return the quantities.

Materials.

"Sixth, To measure and ascertain the quantities of all materials of their different kinds, whether in the rough, or prepared, or partly prepared for the works in the buildings, and return them accordingly.

Plant and appliances.

"Seventh, To measure and value the whole of the plant and appliances on the grounds necessary for the carrying on of the work, including sheds, fencing, &c., and return the same accordingly, with prices and quantities of each item."

Verbal instructions subsequently given.

There were verbal instructions subsequently given not to measure Nepean facing by the cubic foot, but on the superficies of the wall, where it had been substituted for limestone. In the Parliament building it was said to be bedded ten inches in the walls; in the Departmental building nine inches The change in the mode of measuring this work arose from the circumstance that in the correspondence and estimates about the Nepean facing, it is sometimes spoken of by the cubic foot, but on referring to Mr. McGreevy's acceptance of the price of 21 cents for the substitution, he mentions it by the superficial foot, and it has been so measured. The time required for the measurements and calculations of quantities has exceeded what the Commission contemplated, but it is believed that no time has been spent unnecessarily, and that the utmost diligence in performing the work intrusted to them has been shown by all employed; indeed Mr. Fuller in his evidence says that to make a positive estimate for the completion of the Parliamentary building would take months.

Time required for measurement exceeded expectations.

Measurements available for future use.

Their measurements and calculations minutely detailed as they are, will be available, it is hoped, for future use, in case any difficulties should again arise respecting the measurement and value of the work.

The estimates prepared upon the measurements under this Commission have been made in nearly the same order as those of the Hon. Mr. Killaly, that they may be the more easily compared.

Schedules A and *a*.

The schedule of work done on the Parliamentary building is marked A; the schedule *a* attached to it is the day bills of work done, amounting to $347,464.44.

Schedules B and *b*.

The schedule of work done upon the eastern Departmental building is marked B, and the schedule *b* attached to it is the day bills of work done, amounting to $227,342.91.

Schedules C and *c*.

The schedule of work done on the western Departmental building is marked C, and the schedule *c* attached to it, is the day bills of work done, amounting to $188,156.71.

Schedule G.

The schedule G is the statements and measurements of the work prepared for the Parliamentary building, amounting to $27,630.26.

Schedule H.

The schedule H is the statement and measurement of the material on the ground, and in the brickyard for the Parliamentary building amounting to $66,369.05.

The schedule I is the list and valuation of the plant, sheds, and workmen's houses for the Parliamentary buildings; and the schedule i attached to it is the plant in the brickyard, amounting to $10,052.12. **Schedule I.**

The schedule K is the statement and measurement of the work prepared, and material on the ground for the eastern Departmental building and of the brick in the brickyard for both buildings, amounting to $44,932.22. **Schedule K.**

The schedule L is the statement and measurement of the work prepared, and material on the ground for the western Departmental building, amounting to $17,525.87. **Schedule L.**

The schedule M is the list and valuation of plant for both Departmental buildings, and the plant in the brickyard, amounting to $16,990.54.

Schedule N is the amount of the expenditure on the buildings till the 29th December last, amounting to $1,106,083.73. **Schedule N.**

Schedule O is the valuation of the external work

The schedules A, B, C, show in the first column, the contract work rated at the prices mentioned in the schedules of prices, attached to the contracts, the aggregate of which, added to the quantities of work yet to be done, at the same rates, shows how far these were applicable to the bulk sums of the respective contracts. In the second column the work and its value, which has been omitted from the contract work at the same rates. In the third, the extra work which, in the language of the Commission, is to "embrace all the work done to make good deficiencies in the plans."—In the fourth the additional work, which in the same language, is to embrace work on foundation lines below contract lines, work connected with heating, ventilation, and sewerage not covered by the contract. In the fifth, heating and ventilation which, in this view is additional work. In the sixth, the total quantity of all the works of every class, rated at what are conceived to be fair prices according to the mode of measurement adopted by the Commission. In the seventh, the, superfluous work, the plans and specifications of the contracts being the standards. In this column is all the picked-faced masonry in the boiler-houses, ducts and drains, for if rubble masonry smoothly pointed was sufficient, as is now admitted, this pickfaced work was all superfluous, and has all been measured in addition as rubble masonry. The distinction between extra and additional works, as used in connection with these buildings, and introduced into the Commission had had the effect of giving a colouring to some of the mismanagement connected with them, by making that appear additional which was in fact extra. The work embraced on the foundation lines below contract lines was caused by deficiency in the plans, which did not show the true but imaginary ground line and was, therefore, extra work, on the very definition of it given in the Commission. **What Schedules A. B. C are.** **Extra and additional work as used.**

It will be observed that in these schedules the prices set upon the extra and additional work, are not those of the schedules attached to the contract, but the prices settled upon, and allowed as the works were in progress, by the architects, sanctioned by Mr. Page and the Department of Public Works. It will be borne in mind that the agreement with Mr. McGreevy, while he was sole tenderer, that the schedule of prices to be attached to the contracts, should not be applied to extra and additional works, was made before the contracts were executed, and that whatever might have been the previous agreement, the contracts themselves settled what the final agreement was. **Prices set upon extra and additional work not those attached to contract.**

Written and contemporaneous parole agreement.

On no principle known to the Commissioners, could there exist together a written and contemporaneous parole agreement about the same thing, nor any agreement made before the sealing of the contracts, which could restrict or modify them. But the difficulty arises from the fact that the architects fixed, and the Department of Public Works afterwards sanctioned other prices than those contained in the schedules to the contracts. That the works, while in progress, were paid for at these prices, and that the Department of Public Works dealt with the contractors respecting this work at those subsequent prices. At this late hour to apply the schedule of prices attached to the contract, to extra and additional work, under these circumstances, would be manifestly unjust, for the work has been so paid for; to get it back is supposed to be out of the question. The Commissioners have therefore adapted the prices which have been so settled upon, as far as they can be applied, and fair prices where they had not before been settled On the same principle, no charge, for rubble stone from the excavations has been made against the contractors, for as the work was going on, they were allowed to use it as their own. In order to show the true state of the account for the whole work, the total of all the quantities of the work of all kinds has been carried out, and rated at prices applicable to the mode of measurement which the Commissioners consider fair, as deduced from the evidence, and applied, under the experience of the gentlemen who, in this branch of knowledge, are on the Commission, on the principle of measure and value.

Contractors dealt with by Department at the subsequent prices.

True state of accounts at fair current rates.

Style of the buildings.

The style of the buildings accords well with the noble and commanding position on which they have been placed. The Parliamentary building especially, presents a very grand, yet very pleasing façade The Departmental buildings are more severe, and broken in their outlines, but contrast, not unfavorably, with the other more regular and chaste building

Works, on the whole, good, except the brick-work,—bad in all, worse in Parliament building.

The works as executed are, upon the whole, good, excepting the brick work in both, especially in the Parliamentary building, which is, to a considerable extent, bad in itself, and worse than in the other buildings, both as regards material and workmanship.*—The objectionable part was done chiefly under sub-contracts, and the bad material was allowed to be used by Mr. Larose, for reasons stated by him, † but he, in this respect, failed to do his duty. The large quantity of bricks rejected by Mr Morris, ‡ it is believed, were for the most part subsequently used in this buliding, § although some of them were removed from the grounds.

How the errors were made, and the superfluous work done.

The errors made, and the superfluous work permitted to be done, arose in all the buildings from the want of due consideration of what was really required, and of proper supervision and control. but a large proportion of this is found in the Parliamentary buildings.

Contractors only to blame for part.

The contractors cannot, in justice, be censured for doing as much extra and additional work, as the imperfect plans or new requirements of the buildings rendered necessary, for by the performance of these alone, at prices other than those mentioned in the schedule, could they have saved themselves from ruin. For the unnecessary and useless work, they are to blame, for the want of supervision did not justify them in doing what was clearly erroneous, unnecessary and superfluous. It is, nevertheless, creditable to them that under the circumstances, with the exception of the brick work, the purely contract work has been so well and fairly executed.

---

* McK. † L. ‡ Mo. § L.

The work yet to be done on the Parliament building is shown to be $636.682.01, as by the estimate marked D. The work yet to be done on the eastern Departmental Buildings is shown to be $164,929.83, as by the estimate marked E. The work yet to be done on the Western Departmental building is shown to be $140,768.96, as by the estimate marked F. These estimates have been made at the same scale of prices and mode of measurement as those for the work already done. What yet to be done.

The measurements and prices allowed to the contractor in the progress estimates for the Parliamentary Building on his contract work, and extra and additional work taken together, were, in the opinion of the Commissioners, remunerative, for the amount is in excess of the value of the work estimated at fair prices, according to the mode of measurement adopted by the Commission. He had, besides the rubble stone which came from the excavations, an item of no inconsiderable value, which, on a close accounting, ought to be charged against him. His schedule prices were 31 per cent. in excess of what would have represented the bulk sum of his contract.

The measurements and prices allowed the contractors in the progress estimates for the Departmental buildings on their contract work, and extra and additional work taken together, were, in the opinion of the Commissioners, not remunerative, for the amount is not in excess of the value of the work estimated at fair prices, according to the mode of measurement adopted by the Commission.

These contractors, too, had the rubble stone, but it was of less value to them than it was to the other contractor, for in the Western Departmental building little, comparatively, was used, although in the eastern one it was.

The following summary exhibits the results of this branch of the inquiry in all essential particulars:—

PARLIAMENTARY BUILDINGS. Parliamentary buildings.

Hon. Mr. Killaly's estimate of work done and materials on hand, including day bill	$ 686,120.52
Amount received by contractor	483,163.95
Amount yet due	$ 202,956.57
Estimate of Commission of all work done and materials on hand, including day bill	$ 441,463.75
Amount received by contractor	483,163.95
Amount overpaid contractor	41,700.20
By giving contractor credit for plant, &c., in case he does not finish the building	10,052.12
The balance overpaid will be	$ 31,648.08

DEPARTMENTAL BUILDINGS. Departmental buildings.

Hon. Mr. Killaly's estimate of work done and materials on hand, day bill including	$ 785,609.85
Amount received by contractors	511,391.54
Amount yet due	$ 274,218.31

Estimate of Commission of all work done and materials on hand, including day bill	$ 477,955.71
Amount received by contractor	511,391 54
Amount over paid contractor	33,435.83
By giving contractors credit for plant, &c., in case they do not finish the buildings	16,990.54
The balance overpaid will be	$ 16,443.29

Estimate for completion.

ESTIMATE FOR COMPLETION.

Hon. Mr. Killaly's estimate for completion :—

Parliamentary Buildings	$ 454,825.76
Departmental Buildings	372,394.25
External work	267,290.00
	$1,094,510.00

Estimate of Commission exclusive of materials on hand :—

Parliamentary Buildings	636,253.95
Departmental Buildings	306,696.79
External Work	128,675.00
Works connected with Mr. Garth's Contract	36,727 95
	$1,107,353.69
Add for Superintendence and Contingencies, 15 per cent	16,6103.04
Total	$1,273,456.73

It has been the aim of the Commissioners that this report should be in the narrative form, rather than that of dealing with all the subjects of enquiry in the order in which they occur in the Commission,—but there are matters mentioned therein, which cannot well be disposed of in this way, and will therefore be specially referred to.

Whether plans adopted were of the style called for.

First then, as to whether the plans adopted were of the style of architecture best adapted to the climate of this country, and are of a class and character of workmanship called for by the advertisement inviting competing designs. As the designs have been adopted, they have not made this a subject of special enquiry. The opinion expressed upon their agreement or otherwise with the advertisement, are conflicting. The style of architecture is also the subject of differing opinions, and it is very doubtful whether it is the best adapted for the climate of this country, or for the purposes of the buildings. The climate requires a style admitting of a projecting cornice, and gutters to protect the walls ; this style does not properly admit of either, and the gutters which were intended for the Departmental buildings, have been dispensed with. walls The will be much exposed to the water from the roofs, and to the weather.

Probable want of light in parts.

There will also be found a great deficiency of light in many of the apartments in the Departmental buildings, and in the basements of the Parliament buildings.

Secondly: "As to whether the works were examined, and how often, by an officer of the Department of Public Works and the name of that officer, and whether he approved of the works in progress or otherwise."

How often works were examined by an officer of Department.

It appears that the Hon. Mr. Rose visited* these works on the 20th day of September, 1859, the 5th July, 1860, and in September, on the laying of the foundation stone. Mr. Keefer, the Deputy Commissioner, visited† them on the 6th October and 20th December, 1859. On the 11th April, 21st June, 1st September, and 6th November, 1860, and the 23rd May, 1861. Mr. Rubidge,‡ on the 23rd May, 1861; Mr. Page,§ on the 18th December, 1860, and remained till the beginning of March, 1861. Mr. Cauchon|| visited the works on the 22nd July, and on the 30th October, 1861. The architects say that the Hon. Mr. Rose was taken over all the works and shown the excavations for sewers, and Mr. Stent says his attention was especially drawn to the extra price paid for rock excavation in the western Departmental building over that in the eastern one.¶ Mr. Fuller say Mr. Keefer never disapproved of anything that was going on.** Mr. Morris says the works were examined by the Deputy Commissioner at his visits,†† and that he saw and sanctioned the work in the air ducts and boiler houses.‡‡ Mr. Keefer himself says that on his visit, in April 1860, he saw the works, and also when he was in Ottawa, in June, inspecting the Prescott and Ottawa Railway, when the eastern Departmental building was all up to the basement floor, and about half the basement walls laid in the Parliament buildings, and the model of the library nearly finished. In his visit of September, at the ceremony of laying the foundation stone, he made no inspection. In November he went over the works with the Hon. Mr. Sherwood and the architects, examined estimates with them, and heard complaints of contractors regarding delay in getting plans, but that he has no recollection of the state of the drains and ducts in April, 1860, or when the excavations were commenced, and has no knowledge of the authority for doing them outside the building; that in June he must have noticed the works but does not remember what impression they made on his mind. In November the excavations were far advanced and attracted his notice, when he thought there was going to be an immense amount of unauthorized extra work.§§

Mr. Rubidge says that on the 20th May, 1861, he received instructions from the department and went to Ottawa in the end of the same month, and remained till the end of June; that he made preparations under the directions of Mr. Keefer, who was with him, for an independent measurement of all the extra work which had been done on the buildings, but upon the Hon. Mr. Cauchon's coming into office, the Order in Council under which he acted was rescinded.||||

Thirdly: "As to the amount of damages (if any) the contractors may have sustained, or shall sustain from the works having been suspended. The Commissioners gave notice by addressing letters to Messrs. McGreevy and Messrs. Jones, Haycock & Co., on the 3rd day of September, 1862, informing them respectively that they were prepared to receive any claims for damages which either might have against the Government by reason of the stoppage of the work, and that they would receive any evidence they might wish to give in support of their claims." In answer to this, Mr. McGreevy addressed a letter, dated 9th September, to the Secretary, saying:—

Damages for stoppage of works not claimed.

* Mo., F. St. † Mo., F. St. K. ‡ F. St.
§ F. St. 98, || St. ¶ St. ** F. St. †† Mo.,
‡‡ Mo., §§ K. |||| Ru.,

Mr. McGreevy's reason for declining to submit any.

"I have to acknowledge the receipt of your letter of the 3rd inst., in which you state that you are directed by the Commissioners to say that they are prepared to receive any claim for damages which I may have against the Government by reason of the stoppage of the works.

"In reply, I have to remark that I consider that I am in no wise bound by any report which it may be the pleasure of the Commissioners to make, regarding the works constructed by me at Ottawa.

"I presume that the Commission has issued under the provisions of law; if so, the investigation must be of limited character, and cannot, under any construction of the statute, be made to comprehend the proposed inquiry, the same being beyond the jurisdiction of the Commissioners. I therefore respectfully decline to submit for the consideration of the Commissioners, the adjustment of any claims which I may have against the Government of this Province, arising out of my relations with it, in respect of the buildings at Ottawa."

In answer to the same notice, Messrs. Jones, Haycock & Co., addressed a letter to the Secretary, saying:—

Messrs. Jones Haycock & Co.'s reasons for not submitting their claim.

"We have the honor to acknowledge the receipt of yours of 3rd inst., informing us that the Commissioners are prepared to receive any claims for damages which we may have against the Government by reason of the stoppage of the works, and that they would receive any evidence we might have to offer in support of our claim. In reply, we beg to say that in the settlement made between us and the Hon. Mr. Killaly, acting on behalf of the Government, it was agreed that all claims of the character to which you allude, should be included, which was done.

"We have never been informed that the Government do not consider themselves, and are bound by the settlement then made, and until we are so informed, we think we are precluded from advancing claims which are embraced in it. Acting under this impression, we beg you will inform the Commissioners that the only claim we now make is for payment of the balance stated by Mr. Killaly and the architects to be due to us with interest, and such further sum as we can show and are entitled to be paid for materials delivered since his report was made, and which are not included in it, together with necessary expenses for taking care of the works since the 1st day of May last, at which time it was supposed the works would have been resumed."

No enquiry upon this point has been made.

Whether judicious or not to continue work under present contracts.

Fourthly, as to "whether it is judicious and for the public interest that the work should be proceeded with under the present contracts and system, or that the present contractors should be settled with, and that the unfurnished portions of the work relet."

Reasons why they cannot.

The works having been suspended when the contractors were willing to carry them on, it cannot now be expected that they will finish the respective buildings and works under the existing contracts. From their replies to the invitations to attend the measurements, and from the reasons given by them, for declining to submit their claims for damages for the suspension of the works, it is evident that they stand upon the settlements made with them respectively by the Hon. Mr Killaly on the part of the Government. The Commissioners assume there are sufficient grounds for the Government to disclaim those settlements, both as regards the work done, and still to do, and they consider that to carry on the works, there must now be new contracts or some othe

Commissioners do not suppose Gov't. bound by it.

mode adopted to finish the building. They therefore respectfully recommend that the whole work yet to be done, so far as is absolutely necessary for their occupation, be vigorously carried on, that such work shall be offered to the present respective contractors at the prices mentioned in the estimates of work to be done hereto annexed, marked D. E. F., which, if accepted by them, shall be the basis of new contracts on their parts with the Government, but on condition that any brick work originally bad, shall be replaced by them, at their own expense. That if this offer be declined, the work to be done be offered for public tender at prices above, below, or agreeing with the prices in this estimate, or that the work be carried on with the present staff of measurers and clerks of works, under an officer appointed by the Government, to superintend the whole operations. The Commissioners believe that the prices mentioned in this estimate will be remunerative. It is respectively suggested that there should be no difference of salaries given to those officers as at present.

Recommend work to go on

Suggest there should be no difference in salaries of clerks of works

Fifthly, as to whether from "the evidence and the documents that might be submitted, it would be judicious for the public interests longer to continue the architects in their present position or otherwise" has caused the Commission much anxiety. That the architects of both buildings have not done what might have been expected of them, is very apparent. Both induced the Government to suppose their plans could be carried out for the appropriation, but works of the kind are never done, it is said in explanation, for the estimated sum.* Much of the mismanagement, and many of the errors are directly or indirectly attributable to them. Both ordered extensive extra and additional work, to be proceeded with without the written authority of the Department,† and permitted unnecessary and superfluous work to be done.‡ Both allowed Mr. Morris to assume powers he did not possess, neither remonstrated, until on the interesting occasion of laying the foundation stone in September, 1860, it became personally important who should be first, and then they felt their position had not been assigned to them, that all the *eclat* of the arrangement and management had been given to Mr. Morris, and they complained, not of what had annoyed them, but of what they had before omitted and forborne to complain § He was put then on a proper footing. Both signed the progress estimates, leaving it to be inferred the measurements had been made, under their superintendence, contrary to the fact. Both signed the estimates of the Hon. Mr. Killaly, to give them currency, by implication, and their explanations of their conduct in reference to these, to use the mildest expression possible, scarcely removes the impression that they overlooked for the moment the true distinction between right and wrong. There is ground for discrimination between them, especially in the part they took in the matter of settling the prices, and signing these estimates, but they ought to have acted on the ground, that their office in its professional character was subordinate to no one that they were bound without bias or even suspicion of bias to maintain their own judgment of what was right in regard both to principles of measurement, and prices of work intrusted to them, and that in sanctioning either by an act in itself equivocal, for a purpose avowedly other than the determining a correct mode of measurement, and fair prices for work, they were placing themselves in a false position.

Architects have not done their duty in inducing Government to suppose work could be done for appropriation.

In allowing Mr. Morris to assume too much.

In leading Government to believe they measured the work for progress estimates

Ground for discriminating between them.

They place themselves in a false position.

The high tone of professional duty and ettiquette which Mr. Fuller assumed as due to his position in the first instance, would have been detracted from in no way, by his using or at least superintending the use of the tape line in testing the laying out of the foundation walls, or by figuring the plans for

Mr. Fuller.

* K. † F ‡ Mo., F. St. § F.

those less skilful than himself in the execution of a work from which he expected renown rather than reflection; nor would it have lowered him in the least degree to have adapted his supervision to a state of things he found existing rather than that which ought to have existed. But he took no part in determining the prices fixed upon by Mr. Killaly; he signed the estimate however under the impression that its heading relieved him from responsibility.*

Adapting his supervision to existing circumstances.

Mr. Stent more facile.

Mr. Stent was more facile, he was a party to settling these prices and agreed to most of them, during their discussion; † to all of them, in so far as signing the estimates was agreeing to them. ‡ What were fair prices he had the means of knowing as the work was in progress, and in representing them as fair then, he was acting honestly or otherwise; if honestly, there was nothing in the mere circumstance of stopping the work, which made them unfair, or in any other circumstance which made them so, or which should have induced him to agree to other prices so very different. In the matter of the quoins and scaffolding, § items of large amount, they were extra or not, not because the works were suspended.

Quoins and scaffolding.

Explanation of his conduct.

He explains his conduct by alleging that the contract was swallowed up in extra and additional work, and done away with, because as he says it was broken by being stopped; but the very estimates distinguish clearly between the contract and extra and additional work. ‖ In view of all these considerations, the Commissioners nevertheless believe that great inconvenience would be likely to arise in finishing the buildings under other architects. They think that the errors which have been committed may be lessons of experience for their future conduct, not easily forgotten, and that they will be better able now to perform their duties creditably to themselves and satisfactorily to the Government. The hardship too, is felt of depriving them of the credit of carrying out the buildings to completion. It is, therefore, respectfully recommended that they be continued, but that their duties and allowances be distinctly defined before anything further is done. It is respectfully suggested that in allowing five per cent on the whole expenditure, the expense of the present measurement of the works shall be deducted, for proper measurement was intended to be made by them, under the original arrangement, but that no allowance be made to them for the superfluous and unnecessary work. In the case of the Parliamentary buildings in England, it is understood that three per cent was allowed for plans and supervision, and one per cent for measurement.

Commissioners' views.

Their reasons.

Hardship of dismissing architects.

No allowance for superfluous or unnecessary work.

Sixthly.—"As to whether provision was made for heating and ventilation, drainage, water and gas supply, and of such works embraced in the estimates, and to what extent provision was made for works of this class." The questions of heating and ventilation has been already disposed of.

Provision in specification for drainage.

There was provision made for drainage by means of glazed earthen pipes in the spefications. In the Parliamentary building, 100 yards pipe, 12 inches; 200 yards, 9 inches; 300 yards, 6 inches; and 300 yards, 4 inches in diameter, were to be provided. In the specifications for the Departmental buildings 1000 feet of pipe, 12 inches, and the same number of feet 6 inches in diameter, were to be provided; beyond these, there was no provision originally made for any drainage. When the boiler houses were allowed to be made ten feet deeper than was originally intended, it caused the sewers exterior to be buildings to be made ten feet deeper in the rock than they otherwise would have been required. For this there was neither provision nor estimate, but it was included in the extra and additional work for heating, ventilation and sewerage.

Deepening of boiler houses causes sewers to be deepened also.

* F. † St. ‡ St. § St. ‖ St.

The specifications provided for chases in the walls for pipes, but none have been made in them. There is no good reason given for the omission. The Deputy Commissioner supposed they had been made. The architects say they had no instructions, and no plan given of them, and therefore did not cause them to be made. This omission will cause extra expense, spoken of by some as very large, by others as very small. Some injury will be done to the walls in introducing water and gas into the buildings. It is a small item in the mismanagement arising from want of due consideration of what was really to be done, before the buildings were commenced. Chases. Remarks of Deputy Commissioner and architects.

Seventhly.—"As to all expenditure that has been incurred directly or indirectly connected with the buildings." All expenditure connected with buildings.

The estimates prepared under the Commission, show the amount incurred for work done, and materials provided for the work. The amount actually paid for services, and an account of work, directly or indirectly incurred about the buildings, from the beginning up to the 29th day of December last, was $1,106,083.73, which is detailed in schedule N, hereto annexed, to which special reference is respectfully directed. Estimates prepared under Commission. Schedule.

The Plan A, is a plan of the grounds showing a proposed arrangement for finishing the quadrangle in front of the buildings. Plan A.

Plan B shows the foundations of the Parliament building as they are completed. Plan B.

Plan C, a small block plan of the Parliament building. Plan C.

Plan D, a plan of the foundations of the Parliament building as finished, with the contract plan shown upon it in a darker colour. Plan D.

Plan E, a small tracing of the Parliament building. Plan E.

Plan F, is foundations of main tower. Plan F.

Plan G, sections of ducts and drains in Parliament building, with section of masonry in main drain and ducts. Plan G.

Plan H shows elevation of grounds by Mr. Slater. Plan H.

Plan I, a small tracing of the Parliamentary building. Plan I.

Plan K is a plan showing edge lines of excavation, Parliament buildings. Plan K.

Plan L, main sewer, west Departmental building. Plan L.

Plan M, main sewer, west Departmental building, with elevation showing drain and ducts. Plan M.

Plan N, basement floor Parliament building, showing work as executed and contract work. Plan N.

Plan O, ground floor of do do Plan O.

Plan P, first floor of do do Plan P.

Plan Q. Plan Q, foundations west Departmental building, showing the work as executed and the contract work.

Plan R. Plan R, basement floor of do do

Plan S. Plan S, ground floor of do do

Plan T. Plan T, first floor of do do

Plan U. Plan U, foundations east Departmental building, showing the work as executed, and the contract work.

Plan V. Plan V, basement floor of do do

Plan W. Plan W, ground floor of do do

Plan X. Plan X, first floor of do do

Plan Y. lan Y, plan of grounds and buildings; showing position and direction of main drains, over which are some of the ducts.

Plan Z. Plan Z, showing the air ducts leading to the buildings.

Plan A a. Plan Aa, Plan with cross sections of grounds, showing a mode of finishing them.

The following are detailed drawings for finishing:

No. 1 is plan and sections, extension east wing of eastern block, Departmental buildings.

No. 2, Steps to east door-way do do

No. 3, Cornice for main tower do do

No. 4, Stair cases in building, both blocks.

No. 5, Details of do do

No. 6, Finishing of archways to do

No. 7, Chimney caps do do

No. 8, Large window for main tower, east block.

No. 9, Steps to entrance to main tower, both blocks.

No. 10, do to south doorway do

No. 11, Plan of ventaduct, eastern block.

No. 12, Plan of ducts and sewer do

No. 13, Basement plan, showing alteration in boiler house, eastern block.

No. 14, Boiler house roof.

It is believed that all the material enquiries contained in the Commission have been reported upon in one way or the other, although not in the order in which they are there mentioned; but lest any errors have occurred, or any conclusions have been drawn which are not warranted, or any thing omitted which ought to have been reported, the Commissioners respectfully beg leave to report, the Commission itself, all the proceedings had under it, all the written testimony of the respective witnesses subscribed by them, all the contracts, plans, schedules, specifications, estimates, letters and documents of every description had before them.

JNO. WILSON, Chairman.
JOSEPH SHEARD,
V. BOURGEAU,
Commissioners.

D. STARK,
Secretary.

Dated at Ottawa, the
29th day of January, 1863.

R

SCHEDULES

REFERRED TO IN

REPORT OF COMMISSION.

PARLIAMENT BUILDINGS, OTTAWA.

SCHEDULE A.—Summary of Measurement of Work done.

	Valuation at Schedule and Progress Estimate Rates.	Commissioners' Valuation.
	$ cts.	
Contract work at Schedule rates.....	119,875 87	
Omissions from contract at Schedule rates.....	8,193 64	
	111,682 23	
Extra work at Progress Estimate rates.....	6,022 57	
Additional work at Progress Estimate rates.....	103,610 31	
Work for heating and ventilation at Progress Estimate rates.....	114,183 56	
Total carried to general summary.....	$335,498 67	$328,961 08

THOMAS GUNDRY,
JOHN BOWES.

rk done.

nmissioners' Valuation.

$328,961 08

RY,

Greevy,
ecember,

49 65

2551 75

1490 00

1639 76

1243 75

8117 06

SCHEDULE A.

MEASUREMENT OF WORK DONE TO THE PARLIAM

No.	DESCRIPTION OF WORK.		Contract Work. Quantities.	Contract Work. Rate.	Contract Work. Amount.	Omissions from Contract. Quantities.	Omissions from Contract. Rate.	Omissions from Contract. Amount.	Extra Work. Quantities.	Extra Work. Rate.	Extra Work. Amo
				$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$
1	Earth excavation	cubic yards and feet.	2074 26	0 21	435 75						
2	Hard clay excavation, and clay mixed with boulders	do									
3	Rock excavation to 5 feet deep	do	541 13	0 52	281 57						
4	do 10 do	do	19 10	0 52	10 07						
5	do 15 do	do									
6	Earth filling inside building	do	1973 00	0 10	197 30						
7	do outside building	do	1863 21	0 10	186 38						
8	Broken stone filling between walls	do									
9	6 inch drain pipe laid	lineal yards.	52 00	0 73	37 96						
10	9 do do	do	83⅓ 00	1 05	87 85						
11	10 inch bends	No.									
12	Rough concrete	cubic yards.	98 00	1 58	154 84	98 00	1 58	154 84			
13	Fine concrete	do	23 00	2 60	59 80						
14	Removal of old buildings	say			400 00						
15	Rubble masonry in foundations	toises.	1177 48			10 49			107 00	8 00	
16	do basement	do	2275 6			554 10			166 27	8 00	1
17	do ground floor	do	980 29			19 29			135 39	8 00	1
18	do first floor	do	619 52			0 24			166 16	8 00	1
19	do to tower 1st., 10 feet above main cornice	do	109 21			585 4	4 20	2457 31			
20	do do 2nd., 10 do do	do	109 21								
21	do do 3rd, 10 do do	do	42 21								
22	Picked face limestone to boiler house	supl. feet.	5314 36	4 20	22321 60						
23	do do ducts and piers, inside building	do									
24	do do circular to do	do									
25	Block limestone arches	cubic feet.									
26	Picked faced to do	supl. feet.									
27	do to circular	do									
28	Rock faced ashlar	do									
29	Limestone facing to walls as per specification	supl. yards.	1192 1-9	0 52	2179 90						
30	Nepean stone facing, add over limestone do	do									
31	do do rubble	do									
32	Additional on large bond stones in tower	do									
33	Native sandstone in groins	cubic feet.	4745 in. 2	0 50	2372 58	110 9	0 50	55 37			
34	Picked face work to do	supl. feet.	7818 7	0 17	1329 16	562 9	0 17	95 67			
35	Chiselled draft to angles	linl. feet.									
36	Nepean relieving arches, increased proportion above that required by contract, face included in measurement of facing	do	599 in. 2								
		do									
37	Potsdam stone relieving arches	M.	2,973,849	7 34	21828 05	285.380	7 34	2094 69	33.827	13 50	
38	Bricks laid in mortar	supl. yards.	7104 0	0 76	539 98	572 00	0 76	434 72			
39	9 Brick arches	linl. feet.	2703 0	0 02	54 06						
40	Chamfer on brick	supl. yards.	1055 0	0 25	263 75						
41	Taken from prices estimate, Feb. 1, 1861. Pitch, tar, and sand laid on walls										
42	Rendering in cement to walls and buttresses of Library	do									
43	Barrels of cement used in foundations	No.									
44	Barrels of pitch	do	20 0	6 40	128 00						
45	Brockville stone	cubic feet.	1628 1	0 50	814 04						
46	Plain face to do	supl. feet.	549 6	0 23	126 39						
47	do circular do	do	44 6	0 35	15 58						
48	Sunk face do	do	999 2	0 56	599 53						
49	do circular do	do	60 1	0 84	50 47						
50	Chamfered do	do	22 1	0 42	9 28						
51	Moulded work do	do	24 2	0 53	12 81						
52	do circular do	do	8 2	0 42	3 43						
53	Moulded stops	No.	14 0	0 36	5 04						
54	Ohio stone	cubic feet.	44729 4	0 45	20128 20	754 4	0 45	339 45	1223 6	0 75	
55	Plain face to do	supl. feet.	12500 5	0 22	2750 09	305 7	0 22	67 23			
56	Plain circular do	do	2748 0	0 30	824 40	388 1	0 30	116 43			
57	Sunk face do	do	11916 4	0 35	4170 72	97 11	0 35	34 27			
58	Sunk circular do	do	3984 2	0 50	1992 08						
59	Chamfered do	do	441 6	0 24	105 96	58 6	0 24	14 04			
60	Moulded work do	do	7581 8	0 31	2350 32	275 6	0 31	85 41			
61	do circular do	do	9525 4	0 48	4572 16	78 5	0 48	37 64			
62	Undercut moulded work	do	78 2	0 31	24 23						
63	do circular do	do	1347 6	0 48	646 80						
64	Carved work	do	1901 3	0 76	1444 95	444 8	0 76	337 95			
65	Rubbing	do	237 1								
66	Moulded stops	No.	552 0	0 20	110 40	34 00	0 20	6 80			
67	Holes for stanchions	do	84 0	0 05	4 20						
68	Sinkings, 2 in. diameter, ¾ in. deep	do									
69	Brockville stone in steps	cubic feet.									
70	Picked face to do	supl. feet.									
71	6 inch Limestone flagging	do									
72	8 " do	do									
73	9 " do	do									
74	Sunk face to do	do									
75	3 in Nepean flagging	do									

SCHEDULE A.

DONE TO THE PARLIAMENT BUILDINGS, OTTAWA.

ntract.	Extra Work.			Additional Work.			Heating and Ventilation.			Total Measurement.			Superfluous Work.		
Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.
$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.
				8066 4	0 30	2419 84				10141 3	0 25	2535 28			
				1160 24	0 40	584 35				1460 24	0 35	511 31			
				5844 26	1 25	7306 20	2984 19	1 25	3730 88	9371 4	1 00	9371 15	5013 25	1 00	5013 93
				1399 9	1 90	2658 73	1779 6	1 90	3380 52	3197 25	1 50	4796 89	1290 14	1 50	1935 77
				28 17	2 25	64 42	660 2	2 25	1485 17	688 19	2 00	1377 40	471 8	2 00	942 59
				6499 15	0 35	2274 84				8472 15	0 35	2965 39			
				9354 00	0 35	3273 90				11217 21	0 25	2804 44			
				24 00	1 00	24 00				24 00	1 00	24 00			
										52 00	1 25	65 00			
										83¼ 00	1 55	129 68			
							4 00	1 25	5 00	4 00	1 25	5 00			
154 84															
										23 00	4 00	92 00			
												400 00			
	107 00	8 00	856 00	3871 19	8 00	30970 81	1993 39	8 00	15949 77	7139 3	4 50	32125 75	2272 13	4 50	12475 08
	166 27	8 00	1332 00	612 4	8 00	4896 59	46 00	8 00	368 00	2545 27	5 50	14000 25	269 18	5 50	1481 33
	135 39	8 00	1085 77	159 26	8 00	1275 85	46 50	8 00	375 40	1303 7	6 50	8470 34	5 44	6 50	37 79
	166 16	8 00	1330 37	102 15	8 00	818 22	7 6	8 00	56 88	895 11	7 50	6714 02			
2457 31				4 19	8 00	34 81				113 40	8 44	959 97			
				4 19	8 00	34 81				113 40	9 48	1078 26			
				2 31	8 00	20 60				44 52	10 66	479 30			
										in.					
							5907 3	0 90	5316 52	5907 3	0 84	4962 09	5907 3	0 84	4962 09
				5170 1	0 41	2119 73	19182 8	0 41	7864 89	24352 9	0 34	8279 94	19182 8	0 34	6522 11
				110 00	1 50	165 00				110 00	0 59	64 90			
							854 0			854 00	0 25	213 50			
							306 3	0 41	125 56	306 3	0 30	91 88	306 3	0 30	91 87
							382 00	1 50	573 00	382 0	0 30	114 60	382 00	0 30	114 60
				4577 8	0 41	1876 84				4577 8	0 41	1876 84			
										4192 1-9					
				37729 00	0 21	7923 09				37729 00	0 27	10186 83			
				16107 6	0 27	4349 02	407 6	0 27	110 02	16515 00	0 00	4459 05			
				196 8	9 21	41 30				196 8		53 10			
							28 00	0 55	15 40	4662 5	0 44	2051 46			
55 37							37 4	0 17	6 35	7293 2	0 20	1458 63			
95 67				76 10	0 10	7 68	230 6	0 10	23 05	307 4	0 05	15 37			
				36 10	0 14	5 16				636 10	0 14	89 16			
				5099 5	0 55	2804 68				5099 5	0 55	2804 68			
2094 69	33.327	13 50	456 66	657.769	13 50	8879 88	608.025	13 50	8208 34	3,988,090	12 50	49851 12	132.826	12 50	1660 77
434 72				25½ 00	1 80	45 90	291 00	1 80	523 80	455 00	1 80	819 00			
				169 6	0 05	8 48				2872 6	0 05	143 62			
										1055 00	0 25	263 75			
				229 00	0 20	45 80				229 00	0 20	45 80			
				1230 00	2 25	2767 50				1230 00	2 25	2767 50			
										20 00	6 40	128 00			
				1190 9	0 55	654 91	168 00	0 55	92 40	2986 10	0 66	1971 31			
				226 3	0 30	67 88	403 00	0 30	120 90	1178 9	0 33	388 99			
				8 10	0 37	3 27				53 4	0 46	24 53			
				606 10	0 70	424 78				1606 00	0 53	851 18			
				49 9	0 94	46 76				109 10	0 80	87 87			
				6 9	0 55	3 71				28 10	0 40	11 53			
										24 2	0 66	15 95			
										8 2	1 00	8 16			
				12 00	0 50	6 00				26 00	0 50	13 00			
339 45	1223 6	0 75	917 02	6097 1	0 75	4572 81	352 8	0 75	264 50	51648 3	0 84	43384 53			
67 23				1936 5	0 28	542 20	196 4	0 28	54 97	14327 7	0 25	3581 90			
116 43				746 9	0 40	298 70	6 9	0 40	2 70	3113 5	0 35	1089 70			
34 27				4845 7	0 42	2035 56	237 6	0 42	99 75	16902 6	0 40	6761 00			
				1461 6	0 56	818 44	114 3	0 56	63 98	5559 11	0 50	2779 96			
				266 00	0 32	85 12				649 00	0 31	201 19			
14 04				1178 1	0 40	471 23	28 00	0 40	11 20	8512 03	0 50	4256 13			
85 41				1328 1	0 62	823 41	190 08	0 62	118 21	10965 08	0 75	8224 25			
37 64										78 02	0 63	49 25			
										1347 06	0 88	1185 80			
				24 00	1 8	25 92				1480 07	1 50	2220 88			
337 95				87 5	0 8	6 99	100 02	0 08	8 01	424 08	0 08	33 97			
				84 00	0 50	42 00	16 00	0 50	8 00	618 00	0 50	309 00			
6 80										84 00	0 10	8 40			
				78 00	0 12½	9 75				78 00	0 12½	9 75			
							359 00	1 60	574 40	359 00	0 66	236 94			
							927 11			927 11	0 33	306 21			
				55 00	0 50	27 50	18 09	0 50	9 38	73 09	0 25	18 44			
				45 3	0 75	33 93	568 06	0 75	426 38	613 09	0 30	184 12			
				16 10	0 75	12 63	8 09	0 75	6 56	25 07	0 32	8 19			
							7 00	0 20	1 40	7 00	0 30	2 10			
							1254 07	0 12	150 55	1326 03	0 15	198 94			
				71 8	0 12	8 60	174 06	0 31	54 10	174 06	0 21	36 65			
							1664 08	0 38	632 57	1672 08	0 27	451 62			
				8 00	0 38	3 04	9 9	0 40	3 90	9 9	0 33	3 22			

72	8 " do	do										
73	9 " do	do										
74	Sunk face to do	do										
75	3 in Nepean flagging	do										
39	9 brick arches	supl. yards.	710½ 0	0 76	539 98	572 00	0 76	434 72				
40	Chamfer on brick	lin. feet.	2703 0	0 02	54 06							
41	Pitch, tar, and sand laid on walls	supl. yards.	1055 0	0 25	263 75							
42	Rendering in cement to walls and buttresses of Library	do										
43	Barrels of cement used in foundations	No.										
44	Barrels of pitch	do	20 0	6 40	128 00							
45	Brockville stone	cubic feet.	1628 1	0 50	814 04							
46	Plain face to do	supl. feet.	549 6	0 23	126 39							
47	do circular do	do	44 6	0 35	15 58							
48	Sunk face do	do	999 2	0 56	599 53							
49	do circular do	do	60 1	0 84	50 47							
50	Chamfered do	do	22 1	0 42	9 28							
51	Moulded work do	do	24 2	0 53	12 81							
52	do circular do	do	8 2	0 42	3 43							
53	Moulded stops	No.	14 0	0 36	5 04							
54	Ohio stone	cubic feet.	44729 4	0 45	20128 20	754 4	0 45	339 45	1223 6	0 75	917 62	
55	Plain face to do	supl. feet.	12500 5	0 22	2750 09	305 7	0 22	67 23				
56	Plain circular do	do	2748 0	0 30	824 40	388 1	0 30	116 43				
57	Sunk face do	do	11916 4	0 35	4170 72	97 11	0 35	34 27				
58	Sunk circular do	do	3984 2	0 50	1992 08							
59	Chamfered do	do	441 6	0 24	105 96	58 6	0 24	14 04				
60	Moulded work do	do	7581 8	0 31	2350 32	275 6	0 31	85 41				
61	do circular do	do	9525 4	0 48	4572 16	78 5	0 48	37 64				
62	Undercut moulded work	do	78 2	0 31	24 23							
63	do circular do	do	1347 6	0 48	646 80							
64	Carved work	do	1901 3	0 76	1444 95	444 8	0 76	337 95				
65	Rubbing	do	237 1									
66	Moulded stops	No.	552 0	0 20	110 40	34 00	0 20	6 80				
67	Holes for stanchions	do	84 0	0 05	4 20							
68	Sinkings, 2 in. diameter, ¾ in. deep	do										
69	Brockville stone in steps	cubic feet.										
70	Picked face to do	supl. feet.										
71	6 inch Limestone flagging	do										
72	8 " do	do										
73	9 " do	do										
74	Sunk face to do	do										
75	3 in Nepean flagging	do										
76	4 " do	do										
77	6 " do	do										
78	7½ " Nepean flagging	do										
79	7 " do do	do										
80	Picked face work to do	do										
81	3 in Ohio flagging	do										
82	4 " do do	do										
			in.									
83	3 " Limestone flagging under joists	do	4973 7	08	397 89	4973 7	0 08	397 89				
84	4 " do do	do	16 4	09	1 47	16 4	0 09	1 47				
85	6 " do do	do	292 8	12	35 12	292 8	0 12	35 12				
86	3 " Nepean flagging under joists	do										
87	4 " do do	do										
88	6 " do do	do										
89	Arnprior marble	cube feet.										
90	Circular plain faced to do polished	sup'l feet.										
91	Sunk work	do										
92	Lathed centering	sup'l yard.	1241 4-9	1 05	1303 52	506 1-9	1 05	531 42				
93	Ribbed do	lineal feet.	1443 10	16	231 01							
			T. c. q lb.			tons.						
94	Rolled iron joists	tons.	199 11 3 14	115 00	22953 28	7 15 3 7	115 00	895 92				
95	Wrought iron girders, rivetted plate	do										
96	Wrought iron in chain bond	cwt.	6 1 23	7 00	45 13							
97	Wrought iron in chimney bars and lentels	do	12 3 11	12 60	161 89							
98	Hoop iron bond	do	6 2 22	5 00	33 48							
99	Wrought iron in stanchion and saddle bars	do	2 2 19	9 00	24 03							
100	1 inch Boarding under concrete bars	square.	637 59	1 57	1001 01							
101	Pine lintels	Ft. B. M.	1437 9	9 80	14 08				2453 00	18 00	44 1	
102	Wood bricks	do	4518 0	9 80	44 28							
	AIR DUCTS OUTSIDE BUILDING AND MAIN DRAIN.											
103	Earth excavation	cubic yards.										
104	Add for do said to have been done when frozen	do										
105	Earth filling	do										
106	Rock excavation to 5.0 deep	do										
107	do do 10.0 "	do										
108	do do 15.0 "	do										
109	do do 20.0 "	do										
110	Rough concrete	do										
111	Rubble masonry	do										
112	Picked face limestone ashlar	sup'l feet.										
113	do circular do to ducts.	do										
114	do do do to drain.	do										
115	8 inch Limestone flagging, jointed and laid	do										
115	6 " Nepean do do	do										
117	Centering	sup'l yards.										
					$119.875 87			$8,193 64				$6,022 5

Ottawa, 28th January, 1862.

								71 8	0 12	8 60	1254 07	0 12	150 55	1326 03	0 15	198 94							
											174 06	0 31	54 10	174 06	0 21	36 65							
								8 00	0 38	3 04	1664 08	0 38	632 57	1672 08	0 27	451 62							
											9 9	0 40	3 90	9 9	0 33	3 22							

4 72	33.827	13 50	456 66	657.769	13 50	8879 88	605.025	13 50	8208 34	3,988,090	12 50	49851 12	132.826	12 50	1660 77
				254 00	1 80	45 90	291 00	1 80	523 80	455 00	1 80	819 00			
				169 6	0 05	8 48				2872 6	0 05	143 62			
										1055 00	0 25	263 75			
				229 00	0 20	45 80				229 00	0 20	45 80			
				1230 00	2 25	2767 50				1230 00	2 25	2767 50			
										20 00	6 40	128 00			
				1190 9	0 55	654 91	168 00	0 55	92 40	2986 10	0 66	1971 31			
				226 3	0 30	67 88	403 00	0 30	120 90	1178 9	0 33	388 99			
				8 10	0 37	3 27				53 4	0 46	24 53			
				606 10	0 70	424 78				1606 00	0 53	851 18			
				49 9	0 94	46 76				109 10	0 80	87 87			
				6 9	0 55	3 71				28 10	0 40	11 53			
										24 2	0 66	15 95			
										8 2	1 00	8 16			
				12 00	0 50	6 00				26 00	0 50	13 00			
45	1223 6	0 75	917 62	6097 1	0 75	4572 81	352 8	0 75	264 60	51648 3	0 84	43384 53			
23				1936 5	0 28	542 20	196 4	0 28	54 97	14327 7	0 25	3581 90			
43				746 9	0 40	298 70	6 9	0 40	2 70	3113 5	0 35	1089 70			
27				4845 7	0 42	2035 56	237 6	0 42	99 75	16902 6	0 40	6761 00			
				1461 6	0 56	818 44	114 3	0 56	63 98	5559 11	0 50	2779 96			
04				266 00	0 32	85 12				649 00	0 31	201 19			
41				1178 1	0 40	471 23	28 00	0 40	11 20	8512 03	0 50	4256 13			
64				1328 1	0 62	823 41	190 08	0 62	118 21	10965 08	0 75	8224 25			
										78 02	0 63	49 25			
										1347 06	0 88	1185 80			
95				24 00	1 8	25 92				1480 07	1 50	2220 88			
				87 5	0 8	6 99	100 02	0 08	8 01	424 08	0 08	33 07			
80				84 00	0 50	42 00	16 00	0 50	8 00	618 00	0 50	309 00			
										84 00	0 10	8 40			
				78 00	0 12½	9 75				78 00	0 12½	9 75			
							359 00	1 60	574 40	359 00	0 66	236 94			
							927 11			927 11	0 33	306 21			
				55 00	0 50	27 50	18 09	0 50	9 38	73 09	0 25	18 44			
				45 3	0 75	33 93	568 06	0 75	426 38	613 09	0 30	184 12			
				16 10	0 75	12 63	8 09	0 75	6 56	25 07	0 32	8 19			
							7 00	0 20	1 40	7 00	0 30	2 10			
				71 8	0 12	8 60	1254 07	0 12	150 55	1526 03	0 15	198 94			
							174 06	0 31	54 10	174 06	0 21	36 65			
				8 00	0 38	3 04	1664 08	0 38	632 57	1672 08	0 27	451 62			
							9 9	0 40	3 90	9 9	0 33	3 22			
				32 9	0 45	14 74				32 9	0 34	11 14			
							225 4	0 20	45 07	225 4	0 20	45 07			
							20 6	0 20	4 10	20 6	0 20	4 10			
				20 1	0 27	5 42	13 4	0 27	3 60	33 5	0 27	9 02			
7 89															
1 47															
5 12															
				4973 7	0 12	596 83				4973 7	0 15	746 04			
				16 4	0 31	5 06				16 4	0 21	3 43			
				292 8	0 38	111 21				292 8	0 27	79 02			
				66 0	1 05	69 30				66 0	1 80	118 80			
				375 10	2 50	939 58				375 10	1 87	702 81			
				35 3	1 00	35 25				35 3	1 00	35 25			
1 42				266 2	1 80	479 20	279 1	1 80	502 40	1280 6	1 35	1728 90			
										1443 10	0 12	173 26			
				ton. c. q. lb.			tons.								
5 92				7 7 0 19	156 80	1153 81	5 12 3 2	156 80	884 10	204 80	115 00	23552 00			
				7 0 2 26	140 00	985 12				7 0 2 26	160 00	1125 86			
				36 0 17	11 20	404 90	55 3 22	11 20	626 60	111 1 16	14 00	1559 50			
										6 2 22	14 00	93 75			
										2 2 19	28 00	74 75			
										637 59 0	2 00	1275 18			
	2453 00	18 00	44 15	3838 6	18 00	69 08				7729 3	18 00	139 13			
				936 0	18 00	16 84				5454 0		98 17			
							2246 0	0 30	673 80	2246 0	0 25	561 50			
							309 0	9 50	154 50	309 0	0 25	77 25			
							1806 0	0 50	903 00	1806 0	0 25	451 50			
							2457 0	1 90	4668 30	2457 0	1 00	2457 00	565 0	1 00	565 00
							2376 0	2 25	5346 00	2376 0	1 50	3564 00	247 0	1 50	370 50
							1807 0	3 50	6324 50	1807 0	2 00	3614 00	214 0	2 00	428 00
							165 0	5 00	825 00	165 0	3 00	495 00	15 0	3 00	45 00
							403 0	1 58	636 74	403 0	1 50	604 50			
							4643 0	4 00	18572 00	4643 0	2 50	11607 50	905 0	2 50	2262 50
							15690 0	0 41	6432 90	15690 0	0 34	5334 60	15690 0	0 34	5334 60
							6869 0	1 25	8586 25	6869 0	0 80	5495 20	6869 0	0 80	5495 20
							2781 0	1 50	4171 50	2781 0	0 80	2224 80	2781 0	0 80	2224 80
							2816 3	0 75	2112 19	2816 3	0 35	985 69			
							256 0	0 80	204 80	256 0	0 35	89 60			
							935 4-9	1 80	1683 80	935 4-9	1 35	1262 85			
3 64			$6,022 57			$103,610 31			$114,183 56			$328,961 08			$51,963 53

THOMAS GUNDRY,
JOHN BOWES.

Contract work
Omissions fro

Extra work at
Additional wo
Work for hea
mate rates...

ON

SCI

ACCOUNT of
Contr
1861

rch, 1860.....

April, " .....

May, " .....

June. " .....

July, " .....

August, " .....

SCHEDULE A.—PARLIAMENT BUILDINGS, OTTAWA.

Account of Work done and Material supplied by Mr. Thomas McGreevy, Contractor, from the commencement of the Works up to the 1st December, 1861, as returned in the Progress Estimates.

				$ cts.	$ cts.
March, 1860	3½ days	foreman labourer, at	$1 90	6 65	
	28 "	labourers, at	1 00	28 00	
	6 "	double teams, at	2 50	15 00	49 65
April, "	1 sign board			3 50	
	26 days	foreman stone-cutter, at	$2 50	65 00	
	450 "	stone-cutters, at	2 00	900 00	
	17 "	foreman labourers, at	1 90	32 30	
	288 "	labourers, at	1 00	288 00	
	112 "	single teams, at	1 90	212 80	
	95 "	double teams, at	2 50	237 50	
	30 "	blacksmiths, at	1 75	52 50	
	30 "	blacksmiths' helpers, at	1 00	30 00	
	60 "	carpenters, at	1 50	90 00	
	On account of model house			450 00	
	Iron, steel, oak, fuse, powder, &c			190 95	2551 75
May, "	12 days	foreman stone-cutters, at	$2 50	30 00	
	134 "	stone-cutters, at	2 00	268 00	
	30 "	foreman labourer, at	1 90	57 00	
	301 "	labourers, at	1 00	301 00	
	76 "	single teams, at	1 90	144 40	
	38 "	double teams, at	3 00	114 00	
	236 "	carpenters, at	1 50	354 00	
	Balance on model house			90 00	
	2 sample walls, materials and labour			132 00	1490 00
June, "	7 days	foreman stone-cutters, at	$2 50	17 50	
	48 "	stone-cutters, at	2 00	96 00	
	13 "	foreman labourers, at	1 90	24 70	
	307 "	labourers, at	1 00	307 00	
	13 "	foreman carpenters, at	2 00	26 00	
	204 "	carpenters, at	1 50	306 00	
	8 "	blacksmiths, at	1 75	14 00	
	8 "	blacksmiths' helpers, at	0 90	7 20	
	30 "	masons, at	2 00	60 00	
	68 "	single teams, at	1 90	129 20	
	17 "	double teams, at	3 00	51 00	
	Sundry materials used in models, samples, fences, repairs, &c			351 16	
	Paid on account of modelling			250 00	1639 76
July, "	28 days	stone-cutters, at	$2 00	56 00	
	152 "	labourers, at	1 00	152 00	
	13 "	foreman carpenters, at	2 00	26 00	
	203 "	carpenters, at	1 50	304 50	
	6 "	blacksmiths, at	1 75	10 50	
	6 "	blacksmiths' helpers, at	1 00	6 00	
	65 "	masons, at	2 00	130 00	
	10 "	single teams, at	1 90	19 00	
	13 "	double teams, at	3 00	39 00	
	Sundry materials used in model house, &c			399 15	1142 15
August, "	7 days	foreman stone-cutters, at	$2 50	17 50	
	102 "	stone-cutters, at	2 00	204 00	
	15 "	foreman labourers, at	1 90	28 50	
	284 "	labourers, at	1 00	284 00	
	10 "	foreman carpenters, at	2 00	20 00	
	186 "	carpenters, at	1 50	279 00	
	9 "	blacksmiths, at	1 75	15 75	
	9 "	blacksmiths' helpers, at	1 00	9 00	
	193 "	masons, at	2 00	386 00	1243 75
	Carried over				8117 06

ACCOUNT of Work done and Materials supplied by Mr. Thomas McGreer Contractor, &c.—*Continued.*

			$ cts.	$
	Brought forward			8117
August, 1860	11 days foreman masons, at	$2 50	27 50	
	15 " painter, at	1 75	26 25	
	15 " panes glass, at	0 50	7 50	
	4 lbs. putty, at	0 15	00 60	
	28 lbs. mixed paint, at	0 18	5 04	
	23000 ft. boards and scantling, at	14 00	322 00	
	95 lbs. nails, at	0 6	5 70	
	Mortar in alterations		9 00	
	Iron for model		20 00	
	1375 lbs. soft soap for flues, at	$ 0 06	82 50	
	260 lbs. alum, at	0 20	52 00	
October and November, 1860	62 days foreman carpenters, at	2 00	124 00	668
	416 " carpenters, at	1 50	624 00	
	24 " stone-cutters, at	2 00	48 00	
	9 " foreman masons, at	2 50	22 50	
	92 " masons, at	2 00	184 00	
	27 " foreman labourers, at	1 50	40 50	
	486 " labourers, at	1 00	486 00	
	97 " single teams, at	1 90	184 30	
	11½ " double teams, at	3 00	34 50	
	Paid cash on account of modelling		120 00	
	84 lbs. mixed paint, at	$ 0 15	12 60	
	60200 ft. lumber, at	14 00	842 80	
	1250 lbs. nails, at	0 06	75 00	
	Mortar in alterations		30 00	
	Cash paid Lang for painting		16 15	
	8 windows painted and glazed,	$ 3 00	24 00	
	5 gals. paint-oil, at	1 25	6 25	
	2 gals. turpentine, at	1 00	2 00	
	4 bxs. glass, at	7 00	28 00	
	1 pair "T" hinges, at 40c.; 1 lock, 50 cts		0 90	
	39 yds. factory cotton, at	0 15	5 85	
	10 pkgs. tacks, at	0 10	1 00	
	15 days bricklayers, at	2 00	30 00	
December and January, 1861	32 " painter, at	1 75	56 00	
	6 sashes, at	3 00	18 00	2998 30
	28 panes glass, at	0 20	5 60	
	1 pkg. tacks		0 25	
	2¼ tons straw, at	$ 7 00	15 75	
	82 days labourers, at	1 00	82 00	
	25½ " carpenters, at	1 50	38 25	
	3 " foreman carpenters, at	2 00	6 00	
	8 " labourers, at	1 00	8 00	
	2 " double teams, at	3 00	6 00	
	13825 ft. lumber, at	14 00	193 55	
	170 lbs. nails, at	0 06	10 20	
	6 prs. hinges, at	0 20	1 20	
	1 latch		1 30	
	2 gross screws, at	$ 1 50	3 00	
	Difference in canvass		13 65	
	Cash to Zollikoffer		120 00	
April, "	500 ft. lumber		6 00	522 75
	30 lbs. nails		1 80	
	195¾ days labourer, at	$ 1 00	195 00	
	55½ " masons, at	2 00	111 00	
	23 " stone-cutters, at	2 00	46 00	
	18 " carpenters, at	1 50	27 00	
	1 " double team		3 00	
	1 " single team		1 90	
	100 ft. fuse		0 75	
	15 lbs. powder, at	$ 0 40	6 00	
	500 ft. lumber		6 00	404 45
	Carried over			12710 65

omas McGreev

$ cts.	$ cts.
.....	8117
27 50	
26 25	
7 50	
00 60	
5 04	
322 00	
5 70	
2 00	
20 00	
82 50	
52 00	
	668
124 00	
624 00	
48 00	
22 50	
184 00	
40 50	
486 00	
184 30	
34 50	
120 00	
12 60	
842 80	
75 00	
30 00	
16 15	
24 00	
6 25	
2 00	
28 00	
0 90	
5 85	
1 00	
30 00	
56 00	
	2998 30
18 00	
5 60	
0 25	
15 75	
32 00	
38 25	
6 00	
8 00	
6 00	
3 55	
0 20	
1 20	
1 30	
3 00	
3 65	
0 00	
	522 75
00	
80	
00	
00	
00	
00	
00	
90	
75	
00	
00	404 45
.....	12710 65

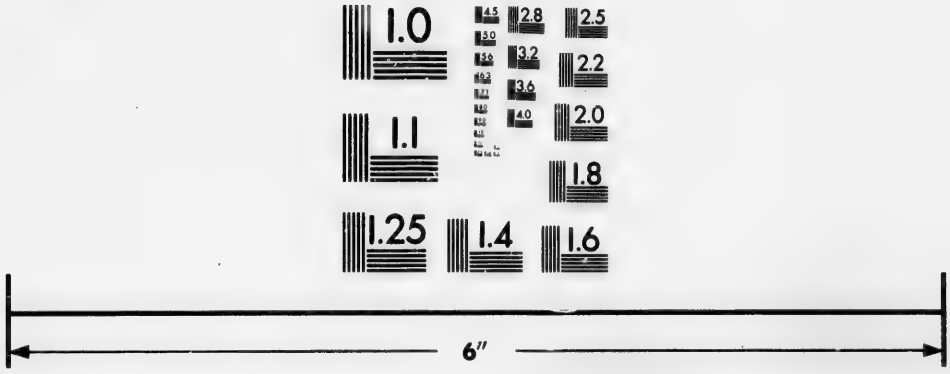
COUNT of Work done and Materials supplied by Mr. Thomas McGreevy, Contractor, &c.—*Continued.*

			$ cts.	$ cts.
	Brought forward		.....	12710 65
	200 bricks		1 00	
	54 ft. ashlar, at	$ 0 50	27 00	
	66½ ft. flags, at	1 00	66 50	94 50
..., 1861	5 days foreman carpenters, at	2 00	10 00	
	43 " carpenters, at	1 50	64 50	
	85 " labourers, at	1 00	85 00	
	6 " stone-cutters, at	2 00	12 00	
	7 " masons, at	2 00	14 00	
	8000 ft. B. M. lumber, at	10 00	80 00	
	Mortar in alterations		20 00	285 50
..., "	20½ days masons, at	$ 2 00	41 00	
	33 " bricklayers, at	2 00	66 00	
	53 " labourers, at	1 00	53 00	
	Mortar in alterations		70 00	230 00
..., "	1½ days stone-cutter, at	$ 2 00	3 00	
	26 " bricklayers, at	2 00	52 00	
	9 " masons, at	2 00	18 00	
	20½ " carpenters, at	1 50	30 75	
	63 " labourers, at	1 00	63 00	
	Mortar in alterations		34 00	
	Lumber and nails		12 75	
	Lock and hinges		3 45	216 95
August, "	29 days masons, at	$ 2 25	72 00	
	8 " bricklayers, at	2 25	18 00	
	1 " carpenter, at	2 00	2 00	
	13 " stone-cutters, at	2 25	29 25	
	75 " labourers, at	1 10	82 50	
	Mortar in alterations		77 49	281 24
September, "	5 days bricklayers, at	$ 2 25	11 25	
	2 " stone-cutters, at	2 25	4 50	
	4 " carpenters, at	2 00	8 00	
	8 " labourers, at	1 10	8 80	
	Mortar in alterations		11 25	
	1132 ft. boards, at	$12 00 @ 1000 ft.	13 58	
	27 lbs nails, at	0 06	1 62	$59 00
				$13877 84

In protecting the building from damage—prices fixed by Mr. Killaly:

			$ cts.	
October and November, 1861	185100 ft. 1-inch boards and scantling, at $10 00 @ 1000 ft.		1854 00	
	1750 lbs. nails, at	$ 0 06	105 00	
	120 days foreman carpenter, at	3 00	360 00	
	618½ " carpenters, at	2 00	1237 00	
	41 " foreman labourers, at	1 40	57 40	
	24¾ " double teams, at	3 00	74 25	
	234 " labourers, at	1 00	257 40	3945 05
	ROOFING BOILER HOUSE, &c., &c.			
December, 1860	18460 ft. 1-inch boards and scantling, at $10 00 @ 1000 ft.		184 60	
	9[illegible] lbs. nails, at	$ 0 06	5 82	190 42
	Carried over		.....	18013 31

IMAGE EVALUATION
TEST TARGET (MT-3)



Photographic
Sciences
Corporation

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

2.8
2.5
3.2
3.6
2.2
4.0
2.0
1.8
1.1
1.0

Account of Work done and Materials supplied by Mr. Thomas McGreevy, Contractor, &c.—*Continued.*

				$ cts.	$ cts.
		Brought forward			18013 31
December, 1860	2	prs. hinges, at	$ 0 20		
	4	days foreman carpenters, at	3 00	12 00	
	59½	" carpenters, at	2 00	119 00	
	19	" labourers, at	1 00	19 00	
	5	" double teams, at	3 00	15 00	
					167 30
					$18180 61

The following was allowed by the Clerk of Works, but on revision disallowed by the architects, and again allowed by Mr. Killaly:

				$ cts.	$ cts.
September and March, 1860	37½	days carpenter, at	$ 2 00	75 00	
	4	" foreman carpenters, at	3 00	12 00	
	1½	" foreman labourer, at	1 40	2 10	
	99	" labourers, at	1 10	108 90	
	8	" double teams, at	3 00	24 00	
	5	" stone-cutters, at	2 00	10 00	
	5	" bricklayers, at	2 00	10 00	
		Total			$322 00
					$18502 61

JOHN BOWES.

DEPARTMENTAL BUILDINGS, OTTAWA.—EASTERN BLOCK.

SCHEDULE B.—A Summary of the Measurements of Work done.

	Valuation at Schedule and Progress Estimate Rates.	Commissioners' Valuation.
	$ cts.	
Contract work at Schedule rates	78,692 21	
Omissions from contract at Schedule rates	9,077 82	
Extra work at Progress Estimate rates	69,614 39	
Additional work at Progress Estimate rates	10,721 13	
Work for heating and ventilation at Progress Estimate rates	32,566 27	
Total carried to general summary	$206,622 70	$225,060 58

ADOLPHE LEVEQUE,
J. H. PATTISON.

of Work

	$ cts.
	322 50
	419 40
	166 40
	140 30
	55 15
	114 95
	36 80
	90 14
	20 79
	26 40
	31 00
	61 6[illegible]
	8 80
	3 00
Carried over	1497 23

SCHEDULE B.

MEASUREMENT OF WORK DONE TO THE EASTERN BLOCK

No.	DESCRIPTION OF WORK.		Contract Work. Quantities.	Contract Work. Rates.	Contract Work. Amount.	Omissions from Contract. Quantities.	Omissions from Contract. Rates.	Omissions from Contract. Amount.	Extra Wo[illegible] Quantities.	Extra Wo[illegible] Rates.
				$ cts.	$ cts.		$ cts.	$ cts.		$ cts
	Excavation for Drains and Air Ducts Outside the Building:—									
1	In earth	cube yds.								
2	In rock to 5 feet deep	do								
3	do 10 do	do								
4	do 15 do	do								
5	do 20 do	do								
6	do 25 do	do								
7	do 30 do	do								
	Excavation for Main Building:—									
8	In earth	do	9997 22	0 21	2099 52					
9	In rock to 5 feet deep	do								
10	do 10 do	do								
11	do 15 do	do								
12	In hard pan	do								
13	Earth filling	do	860 19	0 20	172 14					
14	Rubble stone masonry in foundations	do	3461 14	1 58	5469 17					
15	do do above ground level	do	2346 11	1 75	4106 21					
16	do do from underside of footings to basement floor line	do								
17	do do from basement floor line to ground floor	do							64 7	4 00
18	do do from ground to first floor lines	do				45 19	1 75	79 98	34 7	4 00
19	do do from first floor to eaves line	do								
20	do do in attics	do								
21	do do to 10 feet above eaves	do								
22	do do to 20 do	do								
23	do do to 30 do	do								
24	Random coursed work	do	4319 17	2 53	10928 73					
25	Nepean stone masonry in safes on ground floor	do								
26	do do on first floor	do								
27	Limestone rubble in main and branch sewers	do								
28	do in outside ducts	do								
29	Picked limestone ashlar in sewers, plain face	ft. super								
30	do do super do circular	do								
31	do do in air ducts, outside the building, plain face	do								
32	do do in air ducts outside the building, circular	do								
33	do do inside the building, plain face	do								
34	do do to arches over air ducts inside building, plain face	do								
35	do do do do do circular	do								
36	do do in boiler house, plain face	do								
37	do do sunk do	do								
38	do do chamfered do	do								
39	do do cir. sunk do	do								
40	Nepean flagging to air chambers	do								
41	do air ducts outside the building	do								
42	Nepean stone facing on walls	do								
43	Brainwork composed of Potsdam and Nepean stone	do								
44	Concrete over air chambers	yds. cube.								
45	Dry rubble over do	do								
46	15 inch glazed-ware pipe drain	ft. lineal.								
47	12 inch do do	do	500 0	0 42	210 00	497 6	0 42	208 95		
48	9 inch do do	do								
49	9 inch traps to do	each.								
50	9 inch bend	do								
41	6 inch glazed-ware pipe	ft. lineal.	500 0	0 23	115 00	500 0	0 23	115 00		
52	6 inch traps	each.	No. 28	0 25	7 00	28 0	0 25	7 00		
63	4 inch glazed-ware pipe	ft. lineal.								
54	4 inch traps	each.								
55	Tar and gravel course round outside walls	yds. sup.	653 0	0 25	163 25					
56	Cast iron stove pipe rings, without flange	each.								
57	do do with flange	do							5283	0 25
58	Wrought iron stanchion and saddle bars	per lb.							14384½	0 12
59	Wrought iron in chimney-bars to air chambers and roofs	do	6144 0	0 12	737 28	548 0	0 12	65 76	5912 9	0 80
60	Ohio stone dressings	cube ft.							2463 8	0 26
61	Labour on do plain face	sup. ft.	17780 8	0 42	7467 88	1824 8	0 42	766 28	753 3	0 34
62	do do sunk	do	4299 3	0 48	2063 64	538 9	0 48	258 60	338 0	0 31
53	do do chanfered	do	3673 6	0 50	1836 75	347 11	0 50	173 96	1096 6	0 40
64	do do moulded	do	4392 7	0 55	2415 92	232 10	0 55	128 06	368 5	0 50
65	do do circular sunk	do	2990 3	0 52	1554 93	649 0	0 52	337 48	596 11	0 50
66	do do circular chanfered	do	2567 11	0 54	1386 68	326 10	0 54	176 49	733 0	0 50
67	do do circular moulded	do	2411 7	0 62	1495 18	267 11	0 62	166 11	16227 3	0 08
68	Rubbed face to do	do								
69	Carving do	do			854 96			224 50		
70	Brockville stone dressings, stone	cube ft.								
71	Labour on do plain face	super. ft.	871 6	0 42	366 03	120 2	0 42	50 47		
72	do do sunk	do	279 1	0 48	133 96	82 1	0 48	39 40		
73	do do chanfered	do	104 2	0 50	52 08					
74	do do circular sunk	do	46 4	0 52	24 01					
75	do do circular chanfered	do	1 8	0 54	0 90					
76	Crandled work on Ohio stone, plain face	do	536 1	0 42	225 16					
77	do do chamfered do	do	1374 0	0 50	687 00					
78	Potsdam relieving arches	do	1671 2	0 55	919 14	192 10	0 55	106 06	136 11	0 55
79	Brickwork to external walls and chimnies	per M.	802251 0	7 00	5615 75	59268 0	7 00	415 47		
80	do inner walls	do	1117997 0	6 30	7043 58	73831 0	6 30	165 13	77992 0	13 50
81	Brockville white brick lining to safes	do								

SCHEDULE B.

THE EASTERN BLOCK OF THE DEPARTMENTAL BUILDINGS, OTTAWA.

Contract.		Extra Work.			Additional Work.			Heating and Ventilation.			Total Measurement.			Superfluous Work.		
.	Amount.	Quantities.	Rates.	Amount.	Quantities.	Rates.	Amount.	Quantities.	Rates.	Amount.	Quantities.	Rates.	Amount.	Quantities.	Rates.	Amount
ts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.
					1230 0	0 60	738 00	550 0	0 60	330 00	1780 0	0 25	445 00			
					1188 0	1 90	2257 20	719 0	1 25	898 75	1907 0	1 00	1907 00			
					1251 0	2 25	2814 75	927 0	1 90	1761 30	2178 0	1 50	3267 00			
					1014 0	3 00	3042 00	762 0	2 25	1714 50	1776 0	2 00	3552 00			
					543 0	3 50	1900 50	488 0	3 30	1708 00	1031 0	3 00	3093 00			
					190 0	4 75	902 50	430 0	4 75	2042 50	620 0	4 00	2480 00			
								277 0	5 25	1454 25	277 0	5 00	1385 00			
					432 0	0 60	259 20	1131 13	0 60	678 89	11561 9	0 25	2890 33			
					1116 25	1 25	1396 16	9 11	1 25	11 13	1126 10	1 00	1126 36			
					756 20	1 90	1437 80	272 26	1 90	518 63	1029 20	1 50	1544 63			
					182 21	2 25	411 18	544 12	2 25	1225 00	727 6	2 00	1454 50			
					1747 11	2 25	3931 42	375 5	2 25	844 17	2122 16	0 80	1698 08			
					6460 18	0 25	1615 23				7321 10	0 25	1830 33			
											4279 4	2 25	9628 07			
		64 7	4 00	257 05	4189 19	4 00	16758 85	1232 16	4 00	4930 38	6278 0	2 75	17264 50	486 21	4 00	1947 00
5	79 98	34 7	4 00	137 29	341 14	4 00	1366 00	8 25	4 00	35 70	2533 11	3 25	8235 23			
					496 24	4 00	1987 55	3 18	4 00	14 66	2697 0	3 75	10113 75			
					70 15	4 00	282 25				559 7	3 75	2098 43			
											235 3	4 22	992 75			
											88 24	4 74	421 33			
											35 15	5 33	189 43			
					190 7	6 00	1141 58				190 7	6 00	1141 58			
					83 11	6 00	500 45				83 11	6 00	500 45			
					1632 20	4 00	6530 96				1632 20	2 50	4081 85	846 25	4 00	3387 71
								1530 0	4 00	6120 00	1530 0	2 50	3825 00	28 25	4 00	115 71
					2193 0	0 37	811 41				2193 0	0 34	745 62	2193 0	0 37	811 41
					2917 10	1 75	5106 40				2917 10	0 80	2334 27	2917 10	1 75	5106 40
								3672 0	0 37	1358 64	3672 0	0 34	1248 44	3672 0	0 37	1358 64
								992 0	1 75	1736 00	992 0	0 80	793 60	992 0	1 75	1736 00
								5558 8	0 37	2056 70	5558 8	0 34	1889 94	5558 8	0 37	2056 70
								849 2	0 37	314 19	849 2	0 34	288 72			
								62 6	1 75	109 38	62 6	9 80	50 00			
								4019 9	0 90	3617 77	4019 9	0 84	3376 59	4019 9	0 90	3617 77
								6 6	0 30	1 95	6 6	0 53	3 44	6 6	0 30	1 95
								32 0	0 90	28 80	32 0	0 40	12 80	32 0	0 90	28 80
								256 10	0 80	205 47	256 10	0 80	205 47	256 10	0 80	205 47
								277 4	0 50	138 67	277 4	0 15	41 60			
								4518 9	0 15	677 81	4518 9	0 15	677 80			
					43042 10	0 21	9032 69	879 11	0 21	184 78	43892 9	0 27	11849 04			
					1398 0	0 54	754 92				1398 0	0 54	754 92			
								130 18	1 50	196 00	130 18	1 50	196 00			
								54 18	1 00	54 67	54 18	1 00	54 67			
					80 0	1 00	80 00				80 0	1 00	80 00			
2	208 95										2 6	0 70	1 75			
					123 6	0 52	64 22				123 6	0 52	64 22			
					No. 5.	1 40	7 00				No. 5.	1 50	7 50			
					No. 1.		1 25				No. 1.		3 00			
3	115 00															
5	7 00															
					127 6	0 14	17 85				127 6	0 14	17 85			
					No. 1.		0 56				No. 1.		0 35			
					68 0	0 25	17 00				721 0	0 25	180 25			
					No. 15.	0 50	7 50				No. 15.	0 50	7 50			
					No. 9.	0 50	4 50				9 9	0 50	4 50			
				132 12							528¾ lbs.	0 25	132 12			
		528¾	0 25								579¾ lbs.	0 12½	724 69			
2	65 76	1438¼	0 12½	179 75	863 0	0 12½	107 87	1756 0	0 09	157 64	40416 1	0 84	33949 51			
		5912 9	0 80	4730 20	5959 8	0 80	4767 54	780 0	0 80	624 00	23890 1	0 25	5972 52			
2	766 28	2463 8	0 26	640 55	4794 1	0 26	1246 46	665 11	0 26	173 14	5642 3	0 40	2256 90			
8	258 60	753 3	0 34	256 10	928 11	0 34	315 86	196 7	0 34	66 84	4710 6	0 31	1460 25			
0	173 96	338 0	0 31	104 78	1040 10	0 31	322 66				6189 0	0 50	3094 50			
5	128 06	1096 6	0 40	438 60	884 10	0 40	353 93	147 11	0 40	58 17	3092 11	0 50	1546 46			
2	337 48	368 5	0 50	184 21	454 4	0 50	227 17	8 00	0 50	4 00	3118 6	0 50	1559 25			
4	176 49	596 11	0 50	298 46	279 3	0 50	139 62				3331 8	0 75	2501 00			
2	166 11	733 0	0 50	366 87	440 9	0 50	220 37	16 6	0 35	5 95	19173 4	0 08	1533 86			
		16227 3	0 08	1298 18	2944 1	0 08	235 52						1487 69			
	224 50			545 38			167 62			69 00	1153 1	0 66	761 04			
					512 8	0 80	410 13				1156 1	0 33	384 84			
2	50 47				411 12	0 26	107 88				366 1	0 53	194 92			
8	39 40				169 1	0 34	57 49				151 8	0 40	60 66			
					47 6	0 40	19 00				99 6	0 80	79 60			
					53 2	0 50	26 59				89 8	0 80	71 73			
					88 0	0 50	44 00				730 6	0 33	241 66			
					194 5	0 26	50 56				1749 0	0 40	699 60			
					375 0	0 40	150 00				1779 3	0 55	978 59			
5	106 06	136 11	0 55	75 30	264 0	0 55	145 20									
0	415 47															
0	165 13	77992 6	13 80	1076 29	259747 0	13 80	3584 61	28283 3	13 80	390 04	2447485 0	12 50	30593 56	8783 0	13 80	121 20
					28272 0	13 80	390 43				28 872 0	13 50	389 77			

No. 1.

18	9 inch do do	ch.											
19	9 inch traps to do												
20	9 inch bend	ft. lineal.	500 0	0 23	115 00	500 0	0 25	125 00					
11	6 inch glazed-ware pipe	ch.	8 0	0 25	7 00	28 0	0 25	7 00					
2	6 inch traps	ft. lineal.											
33	4 inch glazed-ware pipe	each.											
34	4 inch traps	sq. sup.	6 0	0 25	1 50								
35	Face and gravel course round outside walls	cacu.											
36	Cast iron stove pipe rings, without flange	do											
37	do do with flange	per lb.											
38	Wrought iron stanchion and saddle bars	do	6144 0	0 12	737 28	545 0	0 12	65 76					
39	Wrought iron in chimney-bars to air chambers and roofs	cube ft.											
60	[illegible]	sup. ft.	17780 8	0 12	2467 88	1824 8	0 12	258 69					
61	Labour on do plain face	do	2999 3	0 18	2663 61	278 9	0 18	258 69					
62	do do sunk	do	573 6	0 30	1836 75	547 11	0 50	173 96					
63	do do chamfered	do	4392 7	0 30	2115 92	237 10	0 55	128 66					
64	do do moulded	do	2100 3	0 55	1154 13	63 9	0 52	33 [illegible]					
65	do do circular sunk	do	2567 11	0 34	1486 [illegible]	293 10	0 34	173 10					
66	do do circular chamfered	do	2411 7	0 62	1495 18	57 11	0 62	166 11					
67	do do circular moulded	do											
68	Rubbed face to do	cube ft.											
69	Cast [illegible] do	do											
70	[illegible]	super. ft.	5 1 6	0 42	[illegible]	1 0	0 42	[illegible]					
71	Labour on do plain face	do	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					
72	do do sunk	do	[illegible]	[illegible]	[illegible]								
73	do do chamfered	do	46 1	0 32	14 [illegible]								
74	do do circular sunk	do	1 8	0 41	0 [illegible]								
75	do do circular chamfered	do	[illegible] 1	0 12	[illegible]								
76	Cramp fixed work on Ontario stone	do	13 6	0 [illegible]	[illegible]								
77	do do chamfered	do	1 1 2	0 [illegible]	329 1[illegible]	[illegible]	0 [illegible]	106 66	1 [illegible]				
78	Potsin [illegible]	do	[illegible] 2	0 [illegible]	[illegible]	[illegible]	[illegible]	115 4[illegible]					
79	Brickwork to external walls	per M.	2251 0	7	1 [illegible]	1 0	6 50	16[illegible] 13	7 [illegible]	[illegible]			
80	do inner walls	do	1117907 0	[illegible]	1615 [illegible]								
81	Brockville white brick lining to safes	do	218563 0	2[illegible] 00	437 26	218563 0	2[illegible] 00	437 26					
82	Toronto do do	do	68699 0	[illegible] 00	2610 [illegible]	68699 0	[illegible] 00	2610 [illegible]					
83	Fire brick casing to safes and record rooms	per lb.	8627 0	0 [illegible]	431 [illegible]	8627 0	0 05	431 35					
84	Hoop iron bond for outside walls	per ton.	110 8 3 27	11[illegible] 00	1270[illegible] 0	11 18 5 6	115 00	1718 12					
85	Rolled iron joists	each.											
86	Drilling holes through iron joists, each hole 2 × 7	super ft.											
87	Nepean stone templates for rolled iron joists	per M.	12 85 0	16 00	1[illegible] 36	4196 0	16 00	71 93					
88	Lumber in bond timbers, wall plates and lintels, B. M.	do	151323 0	19 00	278[illegible] 13								
89	Framed timbers in roofs	do											
90	Timbers for temporary roofing	do											
91	Fir poles for do	per sq.											
91	Felt covering for do	per M.											
93	1 inch boards for do	do											
94	1½ inch do do	per sq.	105 13	2 45	258 32								
95	12 inch grooved and tongued boarding to decks of roofs	do	279 53	1 65	461 22								
96	do do for slopes	do	12 65	6 65	84 12								
97	Slating, including felt	per cwt.	2 0 21	7 00	15 31								
98	Milled lead to one valley	super ft.	2737 0	0 07	191 59	298 8	0 07	20 92					
99	Centreing for arches, sheeted	lineal ft.	2339 6	0 12	280 74	24 0		2 88					
100	do do ribbed												
101	Picked face labour on skew-locks of cut stone arches to air ducts and sewer	super. ft.											
	Total				$78,692 21			$9,077 82					

1? ?0			
?0			
65 76	528½ 0	0 25	132 12
	1438½ 0	0 12½	179 75
	5912 9	0 80	4730 20
766 28	2463 3	0 26	640 55
258 69	753 3	0 34	256 10
173 96	338 0	0 31	104 78
128 06	1096 6	0 40	438 69
327 48	368 5	0 50	184 21
176 49	596 11	0 50	298 46
166 11	733 9	0 50	366 87
	10227 3	0 08	1298 18
221 50			545 58
[illegible] 47			
[illegible] 40			
106 06	136 11	0 55	75 30
415 47			
165 13	77992 0	12 [illegible]	1076 29
437 26			
2610 7?			
1?? ?5			
1718 12			
71 93			
20 92			
2 88			
$9,077 82			$10,721 13

No. 1.		1 25
127 6	0 11	17 85
No. 1.		0 56
68 0	0 25	17 00
No. 15.	0 50	7 50
No. 9.	0 50	4 50
863 0	0 12½	107 87
5959 8	0 80	4767 51
4791 1	0 26	1246 46
928 11	0 34	315 86
1040 10	0 31	322 66
884 10	0 40	353 93
454 4	0 50	227 17
279 3	0 50	129 62
440 9	0 50	220 37
2911 1	0 08	235 52
		167 62
512 8	[illegible]	410 13
411 1?	0 28	107 88
161 1	0 34	57 49
[illegible]	0 10	19 00
[illegible]	0 50	26 59
[illegible]	0 50	44 60
191 5	[illegible]	[illegible] 00
575 0	0 10	150 00
264 0	0 55	145 20
259747 6	13 80	3584 61
23872 0	13 80	398 43
1?1?6 1	115 [illegible]	22?? 50
2048 6	0 15	307 27
2250 0	18 00	40 55
5429 0	18 00	64 72
266 88	3 25	867 36
4336 0	12 00	52 27
3506 0	0 20	701 37
582 0	0 12	69 84
		$82,666 27

1756 0	0 09	1?? 01
780 0	0 80	624 00
665 11	0 26	17? 14
196 7	0 34	?? 84
147 11	0 10	? 17
8 00	0 50	4 00
16 6	0 35	? 85
		? 60
282853 0	13 80	??? 04
No. 60	0 20	12 00
450 0	18 00	7 74
2111 0	18 60	?7 99
418 0	0 03	12 54
852 0	12 00	10 22
3648 0	4 50	104 16
12302 7	0 20	2460 51
2632 0	0 34	894 88
		$43,620 91

No. 1.					
127 6	0 11	17 8?			
No. 1.		0 ?5			
721 0	0 25	180 2?			
No. 15.	0 50	7 50			
9 9	0 50	4 50			
528½ lbs.	0 25	132 12			
5797½ lbs.	0 12½	721 69			
40116 1	0 84	3919 51			
23890 1	0 25	5972 52			
5642 3	0 40	2256 90			
4710 0	0 31	1460 25			
6189 0	0 50	3094 50			
3092 11	0 50	1546 46			
3118 6	0 50	1559 25			
3331 8	0 75	2?01 ?0			
19173 4	0 ?5	1?33 ?6			
		11?7 ??			
1153 1	[illegible]	7?? ??			
1166 1	[illegible]	[illegible]			
366 1	0 52	1?? 92			
151 8	0 40	60 ??			
99 6	0 80	79 6?			
89 ?	[illegible]	7? 7?			
[illegible]	0 73	2?? 6?			
1749 0	0 40	699 60			
1779 3	0 55	978 59			
2447485 0	12 50	[illegible] 56	87?? 0	13 80	121 20
23872 0	13 50	3?9 77			
115841 1	115 00	1?272 61			
60 0	0 20	12 00			
2048 6	0 15	307 27			
2680 0	18 00	48 24			
1?3232 0	23 00	3593 33			
5540 0	18 00	99 72			
418 0	0 03	12 54			
266 88	3 25	867 36			
5008 0	12 00	62 49			
3648 0	4 50	164 16			
105 43	4 50	474 43			
279 53	4 50	1257 88			
12 65	11 75	148 63			
2 0 21	14 00	30 63			
18247 9	0 15	2737 15			
2897 6	0 12	347 70			
2632 0	0 34	894 88			
		$225,060 58			$20,494 76

J. H. PATTISON.

SCHEDULE *b*.

DEPARTMENTAL BUILDINGS, EASTERN BLOCK.—Account of Work done.—Sundries charged Days' Work in the Estimates, 1860-61.

		$ cts.	$ cts.
Stepping rock foundations :			
181 days stone-cutter, at	$1 50	271 50	
17 " foreman, at	5 00	51 00	
			322 50
Pumping Excavations :			
26 days labourer, at	$0 75	19 50	
162 " do at	1 10	178 20	
60 " water cart, at	1 87	112 20	
20 " foreman, at	2 00	40 00	
2 wood pumps, at	20 00	40 00	
1 iron do at	29 00	29 50	
			419 40
Ramming Earth round foundations :			
114 days labourer, at	$1 10	125 40	
20½ " foreman	2 00	41 00	
			166 40
Removing Materials from site of Main Tower and Eastern Extension :			
83 days labourer, at	$1 10	91 30	
5 " team, at	3 00	15 00	
17 " foreman, at	2 00	34 00	
			140 30
Covering foundation walls, temporary, as the work progressed :			
46½ days labourer, at	$1 10	51 15	
2 " carpenter, at	2 00	4 00	
			55 15
Distempering Flues—Heating and Ventilating :			
104½ days labourer, at	$1 10	114 95	
			114 95
Levelling Rock and clearing rubbish from line of Smoke Flues from Boiler House :			
6 days stone cutter, at	$2 00	12 00	
9 " quarryman, at	1 20	10 80	
10 " labourer, at	1 10	11 00	
1 " foreman, at	3 00	3 00	
			36 80
Clearing rubbish from Main Lower Excavation, in the spring of 1861 :			
64 days labourer, at	$1 10	70 40	
2 " horse, at	1 87	3 74	
8 " foreman, at	2 00	16 00	
			90 14
Grinding Mortar to build Flues :			
7 days labourer, at	$1 10	7 70	
8 " horse, at	1 87	13 09	
			20 79
Removing a Spoil Bank, (not measured) :			
24 days labourer, at	$1 10	26 40	
			26 40
Building specimens of Nepean Facing :			
10 days mason, at	$2 00	20 00	
10 days labourer, at	1 10	11 00	
			31 00
Taking down part of Front Wall, West Wing, to admit Basement Windows :			
13½ days mason, at	$2 00	27 00	
26 " labourer, at	1 10	28 60	
2 " foreman, at	3 00	6 00	
			61 60
Digging Foundation for Extra Wall in West Wing :			
8 days labourer, at	$1 10	8 80	
			8 80
Sundry alterations in Masonry as the work progressed :			
1½ day's mason, altering position of a wall opposite a blank window to admit light, at	$2 00	3 00	3 00
Carried over			1497 23

SCHEDULE *b*.—Departmental Buildings, Eastern Block.—(*Concluded.*)

		$ cts.	$ cts.
Brought forward			1497 23
4 days mason, making windows to a door, at	2 00	8 00	
3 " mason, altering position of three windows, at	2 00	6 00	
7 " labourer, do at	1 10	7 70	
2 " foreman, at	3 00	6 00	
12½ " mason, altering level of floor of main tower, at	2 00	25 00	
8 " mason, altering position of two air ducts, at	2 00	16 00	
8 " labourer, at	1 10	8 80	
Taking down and re-building Cold Air Duct Arches, placed in a wrong level by the Clerk of Works:			77 50
24 days mason, at	$2 00	48 00	
24 " labourer, at	1 10	26 40	
2 " foreman, at	3 00	6 00	
Sundries—Heating and Ventilating:			80 40
3 days stone-cutters, cutting register holes through base of main tower, at	$2 00	6 00	
6 days bricklayers joining flues in east extension, at	2 00	12 00	
6 " labourer, at	1 10	6 60	
26 " do removing concrete from top of vault, at	1 10	28 60	
6 " foreman, at	2 00	12 00	
1 " do at	3 00	3 00	
18 " carpenter protecting vault for the winter 1860-61	1 80	32 40	
3 " carpenter, at	1 40	4 20	
9 " labourer, at	1 10	9 90	
75 lbs. nails, at	0 05	3 75	
8000 feet B. M. lumber		24 00	
Erecting Roof over Boiler House for Protecting Boiler Builders:			142 45
12 days carpenter, at	2 00	24 00	
16 " do at	1 40	22 40	
30 yards cotton, at	0 15	4 50	
4½ gall oil, at	1 25	5 63	
45,000 feet B. M. lumber, at	1 50	67 50	
Locks, 90c.; nails, $2 50; spikes, 50c		3 90	
Constructing Relieving Arch over Main Tower Entrance Door:			127 93
26 days stone-cutter, at	2 00	52 00	
2 " carpenter, at	2 00	4 00	
3 " foreman, at	3 00	6 00	
Altering Splays of Brick Jambs, Ground Floor Windows:			62 00
66½ days bricklayer, at	2 00	135 00	
66½ " labourer, at	1 00	73 50	
9,600 bricks, at	8 00	76 80	
Mortar		11 52	
Total amount of day's work accounts from the commencement of the Building to August 14, 1761, as shown in the Estimates			294 82
			2282 33

Ottawa, 27th January, 1862.

WM. HUTCHISON,
Clerk of Works, E. B.

k.—(*Concluded.*)

$ cts.	$ cts.
.....	1497 23
8 00	
6 00	
7 70	
6 00	
25 00	
16 00	
8 80	
	77 50
48 00	
26 40	
6 00	
	80 40
6 00	
12 00	
6 60	
28 60	
12 00	
3 00	
32 40	
4 20	
9 90	
3 75	
24 00	
	142 45
24 00	
22 40	
4 50	
5 63	
37 50	
3 90	
	127 93
2 00	
4 00	
5 00	
	62 00
5 00	
50	
80	
52	
	294 82
.....	2282 33

ON,
Works, E. B.

CK.—A

Valuation.

s.

26

ks.

BLOCK.—
stimates,

$ cts.
322 80
69 50
184 30
26 55
102 30
$705 45

E. Block.

SCHEDULE C.

MEASUREMENT OF WORK DONE TO THE WESTERN BLOCK OF THE DEPARTMNTAL BUILDINGS, C

No.	DESCRIPTION OF WORK.		Contract Work.			Omissions from Contract.			Extra Work.		
			Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amou
				$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$
1	Rubble stone masonry from first floor to eaves line	cubic yards.	238 23	1 75	418 00	64 00	1 75	112 00			
2	do do to 10 feet above eaves	do									
3	do do 20 feet do	do									
1	do do 30 feet do	do									
5	Random coursed work	do	1892 11	2 53	4787 79						
6	Nepean stone masonry in safes	do									
7	Nepean stone facing	sup. feet.									
8	Wrought iron in chimney bars, roof straps, bolts, &c., &c	℔ lb.	6053 0	0 12	726 36						
9	Ohio stone dressings	cubic feet.							2716 4	0 80	2173
10	Labour on do plain face	supl. feet.	4943 7	0 42	2076 16	377 0	0 42	166 74	1536 9	0 26	399
11	do do sunk	do	1873 6	0 48	899 28	372 5	0 48	178 76	514 0	0 34	174
12	do do chamfered	do	1221 10	0 50	610 90	127 7	0 50	63 78	165 2	0 31	51
13	do do moulded	do	2028 4	0 55	1115 57	197 4	0 55	108 53	822 2	0 40	328
14	do do circular sunk	do	870 8	0 52	452 74	115 2	0 52	59 89	363 2	0 50	181
15	do do chamfered	do	1099 11	0 54	593 95	35 9	0 54	19 30	232 4	0 25	58
16	do do moulded	do	1135 2	0 62	703 80				192 7	0 30	57
17	Rubbed face on do								609 8	0 08	48
18	Carving do				572 50			30 00			396
19	Potsdam relieving arches	supl. feet.	964 5	0 55	530 43	46 8	0 55	25 66	147 10	0 55	81
20	Brickwork to external walls and chimnies	℔ M.	316742 0	7 00	2217 19						
21	do to inner walls	do	288923 0	6 30	1820 23				57912 0	13 80	799
22	Brockville white brick lining to safes	do									
23	Toronto do do	do	9400 0	20 00	188 00	9400 0	20 00	188 00			
24	Fire brick casing to safes	do	12972 0	38 00	492 93	12972 0	38 00	492 93			
25	Rolled iron joists	℔ ton.									
26	Bond timber, wall plates, and lintels, B. M	℔ M.	2576 0	16 00	41 21						
27	Framed timber in roofs	do	99927 0	19 00	1898 61						
28	Flatted do for temporary roofing	lin1. feet.									
39	1 inch boarding for do B. M	℔ M.									
30	Felt for do	℔ square.									
31	1½ inch grooved and tongued pine roofing boards to decks	do	131 84	2 45	323 20						
32	do do do to slopes		138 91	1 65	229 20						
33	Centreing for arches, ribbed	lin1. feet.	1294 0	0 12	155 28						
34	do do sheeted	do	1255 0	0 07	87 85				156 0	0 20	31
35	Nepean stone templates	℔ sup. feet.									
26	Wrought iron girder	℔ ton.									
27	Cast iron do	℔ cwt.	39.1.4	3 10	121 79	39.1.4	3 10	121 79			
	Total				21,062 97			1,567 38			4,782

SCHEDULE C.

RTMNTAL BUILDINGS, OTTAWA—FROM THE LEVEL OF THE FIRST FLOOR LINE UPWARDS.

t.	Extra Work.			Additional Work.			Heating and Ventilating.			Total Measurement.			Superfluous Work.		
ount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.
cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.
12 00				97 14	4 00	390 14	39 12	4 00	157 80	1917 20	3 75	7191 52			
										173 19	4 22	732 88			
										104 8	4 74	404 36			
										10 10	5 33	55 27			
				126 7	6 00	757 55				126 7	6 00	757 55			
				13654 7	0 21	2867 46	527 8	0 21	110 81	14182 3	0 27	3829 21			
							356 0	0 12	42 72	6409 0	0 12½	801 13			
	2716 4	0 80	2173 06				338 2	0 80	270 53	11719 9	0 84	9844 59			
66 74	1536 9	0 26	399 56				233 2	0 26	60 62	6365 7	0 25	1586 39			
78 76	514 0	0 34	174 56				173 6	0 34	58 99	2188 7	0 40	875 43			
63 78	165 2	0 31	51 20				51 3	0 31	15 88	1310 6	0 31	406 25			
08 53	822 2	0 40	328 88				126 1	0 40	50 43	2802 3	0 50	1401 12			
59 89	363 2	0 50	181 58							1118 8	0 50	559 34			
19 30	232 4	0 25	58 08							1325 11	0 50	663 00			
	192 7	0 30	57 77							1358 3	0 75	1018 69			
	609 8	0 08	48 78							701 4	0 08	56 10			
30 00			396 66									755 52			
25 66	147 10	0 55	81 31							1064 10	0 55	585 66			
				11033 0	13 80	152 25	2773 0	13 80	38 29	214783 0	12 50	2684 78			
	57912 0	13 80	799 18	39717 0	13 80	548 10	125890 0	13 80	1737 28	628209 0	12 50	7852 61			
				9600 0	13 80	132 48				9600 0	13 50	129 60			
88 00															
92 93															
				5.0.2.23 0	115 00	579 05				5.0.2.23	115 00	579 05			
										102503 0	23 00	2357 56			
				463 0	0 15	69 45				463 0	0 15	69 45			
				29518 0	12 00	354 21				29518 0	12 00	354 21			
				138 91	3 25	451 46				138 91	3 25	451 46			
										131 84	4 50	593 28			
										138 91	4 50	625 09			
	156 0	0 20	31 20							1294 0	0 12	155 28			
				2970 0	0 15	450 50				1411 0	0 15	211 65			
21 79				12.1.23 0	14 00	174 36				2970 0	0 15	445 50			
										12.1.23 0	160 00	99 65			
67 38			4,782 02			6,922 01			2,543 35			48,132 18			

ADOLPHE LEVÈQUE.
J. H. PATTISON.

SCH

4 d
3
7
2
12½
8
8

Taking down
level by th
24 da
24
2

Sundries—He
3 day
t
6 day
6
26
6
1
18
3
9
75 lbs.
8000 feet

Erecting Roof o
12 days
16
30 yard
4½ gall
45,000
Locks,

Constructing R
26 days
2
3

Altering Splays
66½ days
66½
9,600 bric
Mortar ...

Total amount of
to August 14,

Ottawa, 27th

CK.—A

Valuation.

s.

26

rks.

BLOCK.—
timates,

	$ cts.
	322 80
	69 50
	184 30
	26 55
	102 30
Grand Total	$705 45

Ottawa, Jan. 16th, 1863.

WM. HUTCHISON,
Clerk of Works, E. Block.

SCHEDULE C

MEASUREMENT OF WORK DONE TO THE DEPARTM

No.	DESCRIPTION OF WORK.		Contract Work.			Omissions from Contract.			Extra W	
			Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rat
				$ cts.	$ cts.		$ cts.	$ cts.		$ c
	EXCAVATION TO MAIN SEWER AND AIR DUCTS, OUTSIDE BUILDING.—									
1	Earth	cube yards.	378 19-27	0 21	79 53					
2	Rock, to 5 feet deep	do	222 6-27	0 52	115 56					
3	Do 10 do	do	55 16-27	0 52	28 90					
4	Do 15 do	do								
5	Do 20 do	do								
6	Do 25 do	do								
7	Do 30 do	do								
8	Rubble masonry in main sewer and outside cold air ducts.	do								
9	Picked face to sides of main sewer	feet super.								
10	Do circular to arches of do	do								
11	Picked face to sides of main sewer	do								
12	Do circular to arches of do	do								
13	Nepean flagging, 3 in. thick, to do	do								
14	Centring to main sewer and air ducts	do								
15	6 in. glazed stoneware drain pipe	feet lin.	500 0	0 23	115 00	452 0	0 23	103 96		
16	9 in. do do	do								
17	12 in. do do	do	500 0	0 42	210 00	509 0	42 00	210 00		
	EXCAVATION FOR BUILDING.—									
18	Earth	cube yards.	4429 19-27	0 21	930 24					
19	Rock, to 5 feet deep	do	815 24-27	0 52	424 26					
20	Do 10 do	do	655 13-27	0 52	340 95					
21	Do 15 do	do								
22	Do 20 do	do		9 20						
23	Earth filling and levelling from spoil bank	do	632 20-27	1 58	126 55					
24	Rubble masonry in foundations to ground level	do	3102 12-27	1 75	4901 86					
25	Do above do in internal walls	do	554 24-27	2 53	971 06					
26	Do random coursed work external do	do	661 20-27	2 53	1674 20					
27	Do do ground to first floor do	do	1525 18-27	2 53	3859 94	17 17-27	2 53	44 60		
28	Do internal walls, ground to first floor	do	108 12-27	1 75	189 78	22 11-27	1 75	39 21		
29	Do in foundations to basement floor	do								
30	Do above do to internal walls	do							1 23-27	3 3
31	Do do do ground floor external do	do								
32	Picked face to sides of ducts, inside of building	feet super.								
33	Limestone arches over do do do	feet cube.								
34	Picked face to do do do do	feet super.								
35	Do to boiler house	do								
36	Do circular to arches inside of building	do								
37	Do chamfer to slides do do	do								
38	Brick, tar and gravel course on walls	yards super.	1008 0	0 25	252 00	498 0	0 25	124 50		
40	Nepean stone facing	feet super.								
41	Potsdam stone relieving arches	do	132 6	0 55	72 87					
42	Dressed lime stone in angle quoins	do	907 4	0 42	381 08	907 4	0 42	381 08		
43	Ohio sand stone in do	feet cube.								
44	Plain face on do	feet super.								
45	Chamfer on do	do								
46	Do on lime stone quoins	do	29 10	0 25	7 46	29 10	0 25	7 46		
47	Ohio sand stone in dressings	feet cube.							189 9	0 4
48	Plain face on do	feet super.	6044 1	0 42	2538 51				134 10	0 2
49	Sunk face on do	do	1051 3	0 48	504 60				41 10	0 3
50	Chamfer on do	do	2270 11	0 50	1135 46				43 1	0 3
51	Moulded on do	do	1502 5	0 55	826 33				66 1	0 3
52	Circular face do	do	275 3	0 52	143 13				2 11	0 3
53	Do sunk do	do	82 2	0 52	42 73					
54	do chamfer do	do	665 11	0 54	359 60	31 10	0 54	17 19	20 9	0 5
55	do moulded do	do	218 7	0 62	135 52					
56	Rubbing	do							1264 4	0 0
57	Carving				271 60					
58	3-in. Nepean stone flagging hot air flues	do								
59	Do do under joists	do								
60	Do do ventilating flues	do								
61	Do do do	feet cube.								
62	3-in. lime stone flagging under joists	feet super.	2262 4	0 04	90 49	2262 4	0 04	90 49		
63	Brickwork in external walls and chimnies	℔ M.	468430 0	7 00	3279 03	83663 0	7 00	585 64		
64	Do in internal walls	do	514983 0	6 30	3244 39				17728 0	10 0
65	Do in arches	do								
66	Nepean rubble in safes	yards cube.								
67	Lime stone do in do	do	30 4-27	1 75	52 76					
68	Common bricks in do	℔ M	76582 0	6 30	482 47	67944 0	6 30	428 05		
69	Brockville white bricks in safes	do								
70	Toronto pressed do in do	do	25167 0	20 00	503 34	25167 0	20 00	503 34		
71	English fire do in do	do	25351 0	38 00	1989 34	52351 0	38 00	1989 34		
72	Ohio stone in do	feet cube.								
73	Plain face on do do	feet super.	371 0	0 42	155 82					
74	Sunk do on do do	do	51 4	0 48	24 64	4 1	0 48	1 96		
75	Rolled iron joists	per ton.	109.14.3 3	115 00	12619 95	34.5.2 15	115 00	3492 40		
76	Wrought iron in chimney bars and hot air flues	per lb.	670 0	0 12	80 40					
77	Do cramps, cut stone	do	1.108 0	0 12	120 96					
78	Patent hoop iron bond	do	8.197 0	0 05	409 85	8.197 0	0 05	409 85		
79	Wrought iron saddle bars to windows	do							126 0	0 2
80	Cast iron 7-inch stove-pipe rings	do								
81	Centreing	each.	637 0	0 07	44 59					
82	Ribbed do for cut stone	feet super.	883 0	0 07	58 31					
83	Lintels, bond timbers, woodbricks, &c	do	11.442 0	16 00	183 07	9.476 0	16 0	151 62		
84	Picked face to skewback of main sewer	feet B M.								
85	Do termination of cold air ducts, outside building	feet super.								
88	Add for works above first floor (see next page.)				21062 97			1567 38		
	Total amount for western block				65,041 10			10,598 07		

SCHEDULE C.

DONE TO THE DEPARTMENTAL BUILDINGS, WESTERN BLOCK.

ns from Contract.		Extra Work.			Additional Work.			Heating and Ventilation.			Total Measurement.			Superfluous Work.		
Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.
$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.
								174 15-27	0 30	52 37	553 7-27	0 25	138 32			
					1024 13-27	2 25	2305 08	1014 0	2 25	2281 50	2260 19-27	1 00	2260 70			
					1085 12-27	3 25	3527 69	869 20-27	3 25	2826 66	2010 20-27	1 50	3016 11			
					1043 9-27	5 00	5216 67	639 0	5 00	3195 00	1682 9-27	2 00	3364 67			
					721 25-27	6 00	4331 56	524 21-27	6 00	3148 65	1246 19-27	3 00	3740 11			
					102 9-27	6 00	614 00	846 14-27	6 00	5070 11	948 23-27	4 00	3795 41			
								199 19-27	6 00	1198 22	199 19-27	5 00	998 52			
					660 5-27	3 30	2178 61	3381 21-27	3 30	11159 87	4041 26-27	2 50	10104 91	970 13-27	3 30	3202 58
					1830 0	0 37	677 10				1830 0	0 34	622 20	1830 0	0 34	622 20
					2562 0	1 75	4483 50				2562 0	0 80	2049 60	2562 0	0 80	2049 60
								1326 0	0 37	490 62	1326 0	0 34	450 84	1326 0	0 37	490 62
								816 0	1 25	1020 00	816 0	0 80	652 80	816 0	1 25	1020 00
								5778 9	0 15	866 82	5778 9	0 15	866 82			
					1260 0	0 20	252 00	6164 0	0 20	1232 80	7424 0	0 15	1113 60			
0 23	103 96										48 0	0 42	20 16			
					288 0	0 52	149 76				288 0	0 52	149 76			
42 00	210 00															
					6693 26-27	0 60	4016 38				11123 18-27	0 25	2780 91			
					54 9-27	1 25	67 92	827 23-27	1 25	1034 81	1698 2-27	1 00	1697 07			
					254 9-27	1 90	483 23	3829 4-27	1 90	7275 38	4739 4-27	1 50	7110 72			
					201 15-27	2 25	453 50	2587 26-27	2 25	5845 42	2799 14-27	2 00	5599 22	2000 0	2 00	4000 00
								568 11-27	3 00	1705 22	568 11-27	3 00	1705 22			
					3480 16-27	0 30	1044 18				4113 9-27	0 25	1028 33			
2 53	44 60							35 1-27	3 25	113 76	1543 2-27	3 25	5014 99			
1 75	39 21										86 1-27	2 25	193 58			
											3675 0	2 25	8268 75			
		1 23-27	3 30	6 00	2088 17-27	3 30	6892 48	1735 13-27	3 30	5727 09	1823 19-27	2 25	4103 41	1197 4-27	2 25	2693 58
											2646 10-27	3 25	8600 70			
								4685 6	0 37	1733 63	4685 6	0 34	1593 07	4685 6	0 37	1733 63
								800 5	0 95	760 40	800 5	0 25	200 10			
								828 8	1 25	1035 83	828 8	0 30	248 65			
								5150 6	0 90	4635 45	5150 6	0 84	4326 42	5150 6	0 84	4326 42
								263 0	1 35	355 05	263 0	0 30	78 90			
								50 8	0 26	13 17	50 8	0 31	15 71			
0 25	124 50										510 0	0 25	127 50			
					22417 10	0 21	4707 75	1041 1	0 21	218 63	23458 11	0 27	6333 91			
					27 6	0 55	15 12				210 0	0 55	115 50			
0 42	381 08															
					1005 2	0 40	402 07				1005 2	0 84	844 34			
					1680 6	0 26	436 93				1680 6	0 25	420 12			
					21 8	0 26	5 64				21 8	0 31	6 72			
0 25	7 46															
		189 9	0 40	75 90	1453 8	0 40	581 47	12 11	0 40	5 17	9777 1	0 84	8212 75			
		134 10	0 26	35 06	414 2	0 26	107 68	4 1	0 26	1 06	6597 2	0 25	1649 29			
		41 10	0 34	14 22	188 9	0 34	64 18				1281 10	0 40	512 73			
		43 1	0 31	13 60	1295 11	0 31	402 03	9 8	0 31	3 00	3619 7	0 31	1122 07			
		66 1	0 30	19 82	3139 8	0 40	1255 86				4708 2	0 50	2354 08			
		2 11	0 34	0 99	18 4	0 34	6 23				296 6	0 35	103 77			
					66 9	0 50	33 37				148 11	0 50	74 46			
0 54	17 19	20 9	0 50	10 37	3 10	0 50	1 92				658 8	0 50	329 33			
					209 4	0 50	104 67				427 11	0 75	320 94			
		1264 4	0 08	101 18							1264 4	0 08	101 15			
				71 00									340 60			
								101 11	0 15	15 29	101 11	0 15	15 29			
					2262 4	0 15	339 35				2262 4	0 15	339 35			
								50 8	0 15	7 60	50 8	0 15	7 60			
								63 10	0 18	11 49	63 10	0 44	28 05			
0 04	90 49															
7 00	585 64				29446 0	10 00	294 46	80950 0	10 00	809 50	495163 0	12 50	6189 54			
		17728 0	10 00	177 28	27507 0	10 00	275 07	154755 0	10 00	1547 55	714973 0		8937 16			
								62140 0	10 00	621 40	62140 0	14 00	869 96			
					266 12-27	6 00	1598 67				266 12-27	6 00	1598 67			
					2 0	3 30	6 60				32 4-27	3 25	104 48			
6 30	428 05										8638 0	12 50	107 97			
					25013 0	13 50	337 68				25013 0	13 50	337 68			
20 00	503 34															
38 00	1989 34															
											180 4	0 84	151 48			
					17 4	0 26	4 30				388 4	0 25	97 03			
0 48	1 96										47 3	0 40	18 90			
115 00	3492 40										75.9.0 15	115 00	8677 56			
					32 0	0 09	2 88	869 00	0 09	78 21	1.571 0	0 12½	196 38			
					299 0	0 09	26 91				1.307 0	0 12½	163 38			
0 05	409 85															
		126 0	0 25	31 50							126 0	0 25	31 50			
					No. 35 0	0 50	17 50				No. 35 0	0 50	17 50			
					2.013 8	0 20	402 73	10.075 4	0 20	2015 07	12.726 0	0 15	1908 90			
					133 0	0 12	15 96				966 0	0 12	115 92			
16 0	151 62				1464 0	0 34	497 76				1966 0	18 00	35 39			
											1464 0	0 34	497 76			
								300 00	0 34	102 00	300 0	0 34	102 00			
	1567 38			4782 02			6922 01			2543 35			48132 18			20138 64
	10,598 07			5,339 05			55,560 46			67,266 15			187,451 26			20,138 64

JOHN HARPER, Measurer.
GEO. B. PELHAM, Clerk of Works.

SCH

4
3
7
2
12½
8
8

Taking dow
level by t
24 d
24
2

Sundries—H
3 d

6 d
6
26
6
1
18
3
9
75 ll
3000 f

Erecting Roo
12 da
16
30 ya
4½ ga
45,00
Lock

Constructing
26 day
2
3

Altering Splay
66½ da
66½
9,600 b
Mortar

Total amount
to August

Ottawa, 27t

SCHEDULE C.—DEPARTMENTAL BUILDINGS, OTTAWA, WESTERN BLOCK.—A Summary of the Measurements of Work done.

	Valuation at Schedule and Progress Estimate rates.	Commissioners' Valuation.
	$ cts.	$ cts.
Contract work at Schedule rates	65,041 10	
Omissions from contract at Schedule rates	10,598 07	
	54,443 03	
Extra work at Progress Estimate rates	5,339 05	
Additional work at Progress Estimate rates	55,560 46	
Work for heating and ventilation at Progress Estimate rates	67,266 15	
Total carried to general summary	$182,608 69	$187,451 26

JOHN HARPER, *Measurer.*
GEORGE B. PELHAM, *Clerk of Works.*

SCHEDULE *c.*—DEPARTMENTAL BUILDINGS, OTTAWA, WESTERN BLOCK.—Account of Work done—'Sundries' charged Days' Work in the Estimates, 1860–61.

		$ cts.	$ cts.
Stepping Rock Foundations:			
24 days quarryman, at	$1 20	28 80	
136 " stone-cutter, at	2 00	272 00	
2 " foreman, at	2 00	4 00	
6 " do	3 00	18 00	
			322 80
Removing materials from Site of Boiler House and Main Sewer:			
24 days labourer, at	0 75	18 00	
15 " do	1 10	16 50	
8 " team, at	2 50	20 00	
5 " do	3 00	15 00	
			69 50
Pumping Excavations:			
98 days labourer, at	1 10	107 80	
8 " foreman, at	2 00	16 00	
5½ " carpenter, at	2 00	10 50	
2 iron pumps	25 00	50 00	
			184 30
Heating and Ventilating Protecting Vault for the Winter 1860-61:			
4 days carpenter, at	2 00	8 00	
2 " do	1 80	3 60	
1 " do	1 40	1 40	
3 " labourer, at	1 10	3 30	
3,000 feet B. M. lumber, at	3 00	9 00	
25 lbs. nails		1 25	
			26 55
Heating and Ventilating, Clearing Rubbish from line of Flues and Boiler House:			
39 days labourer, at	1 10	42 90	
54 " distempering flues, at	1 10	59 40	
			102 30
Grand Total			$705 45

WM. HUTCHISON,
Clerk of Works, E. Block.

Ottawa, Jan. 16th, 1863.

SCHE

DETAILS of Work required for

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate.	Amount.	Contract Quantities.
				$ cts.	$ cts.	
1	Earth excavation	cub. yrd.	2226 20	0 21	467 61	2074 26
2	Rock excavation to 5.00 deep	do	1285 22	0 52	668 63	541 13
3	Rock excavation to 10.00 do	do	19 10	0 52	10 07	19 10
4	Earth filling outside building	do	11632 18	0 10	1163 26	1863 21
5	Do inside building	do	1973 0	0 10	197 30	1973 0
6	Digging and re-filling for drains	linl. yd.	774 ½	0 88	681 41	
7	Removal of old buildings.				400 00	
8	Removal of rubbish					
9	4 inch drain laid in pugged clay	do	300 0	0 42	126 00	
10	6 do do do	do	300 0	0 73	219 00	52 0
11	9 do do do	do	200 0	1 05	210 00	82 0
12	12 do do do	do	100 0	1 26	126 00	
13	Syphon traps	No.	23 0	1 00	23 00	
14	Double 6 inch junctions	do	2 0	0 75	1 50	
15	Single 6 " do	do	4 0	0 60	2 40	
16	Do 9 " do	do	2 0	0 75	1 50	
17	Do 12 " do	do	2 0	1 00	2 00	
18	Rough concrete	cub. yd.	1281 11	1 58	2024 62	
19	Concrete under basement floor	do	1297 0	1 58	2049 26	
20	Do to fire proof do	do	1939 0	2 60	5041 40	23 0
21	Fine concrete in public hall	do	8⅓ 0	2 60	21 67	
22	Pugging	squares.	140 59	0 42	59 05	
23	Pitch, tar and sand on walls	sup. ys.	1055 0	0 25	263 75	1055 0
24	Barrels of pitch	No.	20 0		128 00	
25	Rubble masonry to level of main cornice	toises.	5917 52			4468 23
26	Do to 1st 10 above do	do	676 51			109 21
27	Do to 2nd 10 do do	do	656 47			109 21
27	Do to 3rd 10 do do	do	375 32			42 21
29	Do to 4th 10 do do	do	191 39			4729 32
30	Do to 5th 10 do do	do	167 51			
31	Do to 6th 10 do do	do	167 51			
32	Do to 7th 10 do do	do	110 9			
33	Do to 8th 10 do do	do	103 48			
34	Do to 9th 10 do do	do	99 39			
35	Do to 10th 10 do do	do	99 39			
36	Do 11th 10.0 above main cornice	do	77 12			
37	Do 12th 10.0 do	do	44 48			
38	Do 13th 10.0 do	do	5 50			
39			8696 28	4 20	36524 38	
40	Limestone facing	sup yds.	6627 3-9	0 52	3446 21	4192 1-
41	Nepean facing	sup feet.				
42	Native sandstone for quoins	cbc. ft.	9381 8	0 50	4690 83	4634 5
43	Picked face work to do	sup ft.	14224 1	0 17	2418 08	7255 10
44	Pointing to masonry with dark mortar	do	8163 2-9	0 09	734 69	
45	Picked face work to limestone	do	144 0	0 17	24 48	
46	Chamfered work to do	do	116 8	0 42	49 00	
47	Picked face to Nepean	do				
48	Chamfered to do	do				
49	Potsdam stone relieving arches	do				
50	Bricks laid in mortar	M	5202744	7 34	38188 14	688469 0
51	Chamfer on bricks	linl. ft.	3774 0	0 02	75 48	2703 0
52	9 inch brick arches	sup yds.	3092 ½	0 66	2041 05	138½ 0
53	White brick groining	do	87 1-9	1 75	152 44	
54	Fire brick back hearths	do	45 5-9	2 20	100 22	
55	Setting grates	No.	129 0	1 00	129 00	
	Carried over				102462 43	

SCHE

Work required for

s included in Contract.

Rate.	Amount.
$ cts.	$ cts.
0 21	467 61
0 52	668 63
0 52	10 07
0 10	1163 26
0 10	197 30
0 88	681 41
	400 00
0 42	126 00
0 73	219 00
1 05	210 00
1 26	126 00
1 00	23 00
0 75	1 50
0 60	2 40
0 75	1 50
1 00	2 00
1 58	2024 62
1 58	2049 26
2 60	5041 40
2 60	21 67
0 42	59 05
0 25	263 75
	128 00
4 20	36524 38
0 52	3446 21
0 50	4690 83
0 17	2418 08
0 09	734 69
0 17	24 48
0 42	49 00
7 34	38188 14
0 02	75 48
0 66	2041 05
1 75	152 44
2 20	100 22
1 00	129 00
	102462 43

DULE D.

completion of Parliament Buildings.

Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
			Contract and Additional Work.			Work for Heating and Venti'n.			
Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
2074 26	0 21	435 75	380 18	0 25	95 17				
541 13	0 52	281 57	744 9	1 00	744 75				
19 10	0 52	10 07							
1863 21	0 10	186 38							
1973 0	0 10	197 30	1822 0	0 35	637 70				
			887 0½	1 20	1064 80				
		400 00							
52 0	0 73	37 96	248 0	1 25	310 0				
82 0¾	1 05	87 85	116 0½	1 55	180 32				
			213 0	2 10	447 30				
			23 0	1 50	34 50				
			2 0	1 00	2 00				
			4 0	0 90	3 60				
			2 0	1 50	3 00				
			2 0	2 00	4 00				
			1200 0	1 50	1800 00				
			1524 15	1 50	2286 83				
23 0	2 60	59 80	2804 0	4 00	11216 00				
			8 0½	4 00	33 33				
			140 .59	0 75	105 44				
1055 0	0 25	263 75							
		128 00							
4468 23			1118 10	7 50	8386 39	55 11	7 50	414 02	
109 21			640 48	8 44	5407 22				
109 21			570 4	9 48	5404 30	13 33	9 48	129 03	
42 21			332 45	10 66	3548 00	9 14	10 66	98 70	
4729 32	4 20	19864 29	191 39	12 00	2300 60				
			167 51	13 50	2267 25				
			167 51	15 18	2549 39				
			110 9	17 08	1881 64				
			103 48	19 20	1994 66				
			99 39	21 60	2154 00				
			99 39	24 30	2423 25				
			77 12	27 34	2111 25				
			44 48	30 76	1380 78				
			5 50	34 60	205 03				
4192 1-9	0 52	2179 90							
			23611 6	27	6375 11				
4634 5	0 50	2317 21	4740 6	44	2085 82				
7255 10	0 17	1233 49	6561 6	20	1312 20				
			9637 4-9	20	1927 49				
			144 0	20	28 80				
			116 8	30	35 00				
			1425 4	55	783 93				
688469 0	7 34	19733 36	2349820 0	12 50	29372 75	445,226	12 50	5565 33	
2703 0	0 02	54 06	1071 0	05	53 55				
138½ 0	0 76	105 26	2382 0	1 80	4287 60	1,189½	1 80	2141 10	
			87 1-9	6 50	566 22				
			49 69	2 70	135 10				
			141 0	2 00	282 00				
		47576 00			108228 13			8348 18	

SCHE

DETAILS of Work required for completion

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate. $ cts.	Amount. $ cts.
	Brought forward				102462 43
56	Grates	No.			
57	Block limestone	cube ft.	12179 0	0 15	1826 85
58	Sank face to do	sup ft.	4878 0	0 36	1756 08
59	Brockville stone	cube ft.	1628 1	0 50	814 04
60	Plain face to do	sup ft.	549 6	0 23	126 39
61	Do circular to do	do	44 6	0 35	15 54
62	Sunk face to do	do	999 2	0 56	599 52
63	Do circular to do	do	60 1	0 84	50 47
64	Chamfered to do	do	22 1	0 42	9 24
65	Moulded to do	do	24 2	0 53	12 81
66	Do circular to do	do	8 2	0 42	3 44
67	Moulded stops	No	14 0	0 36	5 04
68	Ohio stone	cube ft.	123213 7	0 45	55446 [illegible]
69	Plain face to do	sup ft.	50020 2	0 22	11004 [illegible]
70	Circular do to do	do	6478 2	0 30	1943 46
71	Sunk face do	do	47009 11	0 35	16453 48
72	Do circular do	do	10622 3	0 50	5311 12
73	Chamfered do	do	842 9	0 24	202 20
74	Moulded do	do	22232 3	0 31	6892 00
75	Do circular do	do	24777 11	0 48	11893 48
76	Carved work do	do	4007 0	0 76	3045 32
77	Under-cut moulded do	do	78 2	0 31	24 21
78	Do circular do	do	1347 6	0 48	646 56
79	Rubbed	do	237 1		
80	Moulded stops	No.	1296 0	0 20	259 20
81	Turning 6 inch diam; ballusters in Ohio stone	lin. ft.	884 2	0 34	300 61
82	Carving to caps of do 6 inches high	No.	402 0	1 00	402 00
83	Moulded bases do	do	40 0	0 70	28 00
84	Holes for stanchion bars	do	1648 0	0 05	82 40
85	Ohio stone chimney pieces	do	27 0	12 00	324 00
86	Do do	do	102 0	25 00	2550 00
87	Dressing and cleaning cut stone	do			
88	Marble, Arnprior or other approved	cube ft.	10494 3	1 05	11018 94
89	Plain face to be polished	sup ft.	4179 3	0 53	2215 00
90	Circular do	do	1431 1	0 74	1059 00
91	Sunk face do	do	377 4	0 74	279 22
92	Do circular do	do			
93	Moulded work do	do	1572 8	1 06	1667 02
94	Do circular do	do	5894 3	1 59	9371 85
95	Chamfered do	do	655 10	0 74	485 33
96	Carved work do	do	1057 9	2 00	2115 50
97	Moulded stops do	No.	264 0	0 53	139 92
98	Circular plain face to marble	super. ft.	336 0	0 47	157 92
99	Sunk face do do	do	194 7	0 47	91 45
100	do circular do	do	85 0	0 68	57 80
101	3 inch Marble landings	do	312 0	0 30	93 60
102	3 " Rubbed Ohio hearths	do	1018 0	0 30	305 40
103	2 " Nepean in flues	do			
104	3 " do under joists	do			
105	4 " do do in ducts	do			
106	Sunk work to do	do			
107	2 inch limestone flagging	do			
108	3 " do under joists	do	5361 7	0 08	428 88
	Carried over				253977 [illegible]

SCHEDULE D.

equired for completion of Parliament Buildings.—*Continued.*

ntities included in Contract.			Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
						Contract and Additional Work.			Work for Heating and Venti'n.			
s.	Rate.	Amount.	Quantitiss.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
		102462 43			47576 00			108228 13			8348 18	
0	0 15	1826 88				141 0	18 00	2538 00				
0	0 36	1756 08										
1	0 50	814 04	1628 1	0 50	814 04							
6	0 23	126 39	549 6	0 23	126 39							
6	0 35	15 58	44 6	0 35	15 58							
2	0 56	599 53	999 2	0 56	599 53							
1	0 84	50 47	60 1	0 84	50 47							
1	0 42	9 28	22 1	0 42	9 28							
2	0 53	12 81	24 2	0 53	12 81							
2	0 42	3 43	8 2	0 42	3 43							
0	0 36	5 04	14 0	0 36	5 04							
7	0 45	55446 28	43975 0	0 45	19788 75	95230 11	0 84	79993 97	978 0	0 84	821 52	
2	0 22	11004 42	12194 10	0 22	2682 86	38170 0	0 25	9542 50	733 6	0 25	183 37	
2	0 30	1943 48	2359 11	0 30	707 97	3771 2	0 35	1319 91				
1	0 35	16453 41	11818 5	0 35	4136 45	40918 4	0 40	16367 33	626 6	0 40	250 60	
3	0 50	5511 12	3984 2	0 50	1992 08	6712 10	0 50	3356 41	81 0	0 50	40 50	
0	0 24	202 24	383 0	0 24	91 92	436 11	0 31	135 44	45 0	0 31	13 95	
3	0 31	6892 00	7306 2	0 31	2264 91	14895 7	0 50	7447 79	314 0	0 50	157 00	
0	0 48	11893 48	9446 11	0 48	4534 52	15307 4	0 75	11400 50				
0	0 76	3045 52	1456 7	0 76	1107 00	2218 9	1 50	3328 13	14 0	1 50	21 00	
2	0 31	24 23	78 2	0 31	24 23							
	0 48	646 80	1347 6	0 48	646 80							
			237 1									
	0 20	259 20	518 0	0 20	103 60							
	0 34	300 02				744 0	0 50	372 00	48 0	0 50	24 00	
	1 00	402 00				884 2	0 50	442 08				
	0 70	28 00				402 0	1 50	603 00				
	0 05	82 40	84 0	0 05	4 20	40 0	1 00	4 00				
	12 00	324 00				1464 0	0 10	146 40				
	25 00	2550 00				39 0	16 00	624 00				
						102 0	30 00	3060 00				
								1200 00				
	1 05	11018 84				10835 2	1 80	19503 30				
	0 53	2215 04				4216 9	1 50	6325 13				
	0 74	1059 60				1665 8	2 50	4164 16				
	0 74	279 22				452 4	2 50	1130 83				
						35 0	3 30	115 50				
	1 06	1667 02				1722 8	3 15	5426 40				
	1 59	9371 83				6015 11	4 12	24785 58				
	0 74	485 33				655 10	2 50	1639 58				
	2 00	2115 50				1057 9	6 00	6346 50				
	0 53	139 22				264 0	1 50	396 00				
	0 47	157 02				336 0	1 60	537 60				
	0 47	91 43				239 7	1 60	383 33				
	0 68	57 84				140 0	2 40	336 00				
	0 30	93 60				312 0	0 50	156 00				
	0 30	305 40				1118 0	0 50	559 00				
									500 0	0 15	75 00	
						2426 0	0 15	363 90				
									14975 6	0 30	4492 65	
									1095 0			
	0 08	428 81							14975 6	0 09	1347 80	
		253977 23			87297 86			322358 40			15775 67	

SCH

DETAILS of Work required for complet

No.	DESCRIPTION.		Total Quantities included in Contr		
			Quantities.	Rate.	Amoun
				$ cts.	$
	Brought forward				253977
109	4 inch Limestone underjoists	sup. ft.	16 4	0 69	1
110	6 " do do	do	292 8	0 12	35
111	1 " Slate to urenals, sawn, rubbed, and made hot, and thoroughly saturated with pure oil, grooved, cramped, and fixed together, joints made in red and white lead	do	295 6	0 20	51
112	¾ do do do do	do	411 2	0 18	74
113	6 ⋈ 8 do do do	lineal ft.	102 0	0 66	67
114	Circular sunk work to do	super. ft.	76 6	0 34	26
115	1 inch Slate to Louvres	do	608 0	0 20	121
116	Wood Bricks	F. B. M.	5034 0	9 80	49
117	Centreings	sup. yds.	3865 7-9	1 05	4059	4518
112	Ribbed centreings	lineal ft.	1583 10	0 16	253	735
113	9 ⋈ 3 wall plates and bond timber	do	12287 6	0 03	368	1443
114	Pine lintels	F. B. M.	1681 9	9 80	16	
115	Pine in joists, &c	do	117147 0	15 40	1804	1437
116	do roofs	do	240109 10	20 30	4874	
117	do do wrought and chanfered	do	29880 0	35 00	1045	
118	1½ Roof boarding, 9 inches wide, laid close	squares.	82035 0	2 45	2009	
119	do do tongued and grooved	do				
120	1½ Boarding to decks in 2 thicknesses, 6 inches wide, lower thickness laid close, upper grooved and tongued	do	56 17	6 65	375	
121	4 ⋈ 2 scantling in quartered partitions	lineal ft.	1112 0	0 03	33	
122	4 ⋈ 3 do do	do	1106 0	0 03	33	
123	6 ⋈ 2 do do	do	2832 6	0 03	84	
124	6 ⋈ 4 do do	do	1426 0	0 03	42	
125	3 inch plank gangway in roofs	F. B. M.	8467 6	12 00	101	
126	Hardwood blocks in roof framing	do	270 0	25 20	6	
127	2 ⋈ 1 slate battons	lineal ft.	93125 0	0 00½	46	
128	Sound boarding on fillets	square.	14059 0	1 57	220	
129	Bracketting	sup. feet.	3080 0	0 11	338	
130	Boarding under concrete floors	squared.	78534 2	1 57	1233	
131	2 ⋈ 2 fillets in concrete	lineal ft.	78533 0	0 01	785	637 5
132	1½ ⋈ 1½ do tirrings for ceilings	do	78533 0	0 01	785	
133	4 ⋈ 4 do do	do				
134	1½ best quality tongued and grooved red pine floor boards, not exceeding 6 inches in width	squares.	squares feet. 552 72	3 50	1934	
135	1½ do do white oak	do	296 68	5 25	1557	
136	1½ clean wrought and chamfered red pine skirtings, 9 inches high and 2½ moulding on the top, scribed and back filleted to floors, on 3 inch grounds and wood bricks at 30 feet apart	lineal ft.	14960 6	0 17	2543	
137	1½ Clean white oak, 15 inches high, double faced, chamfered edge 4 inch moulding on top, with grounds fillets and wood bricks as above	do	1050 0	0 34	357	
138	⅝ white oak do 4 inches high	do	316 0	0 04	12	
139	2 inch do do rounded, 9 inches high	do	40 0	0 14	5	
140	¾ matched wrought and double stop chamfered oak sheeting on 3 tiers of 3 ⋈ 1 grounds	sup. ft.	556 6	0 09	50	
141	¾ wrought matched chamfered and tongued pine boarding to ceilings in 6 inch widths	squares.	40131 0	3 50	1404	
142	Pine mouldings to do	sup. ft.	41589 6	0 14	5822	
143	do circular do	do	304 0	0 21	63	
144	3 inch Enrichments to mouldings	lineal ft.	9523 0	0 10	952	
	Carried over				288346

SCHEDULE D.

equired for completi[illegible] of Parliament Buildings.—*Continued.*

...ntities included in Contr...			Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
						Contract and Additional Work.			Work for Heating and Venti'n.			
...ties.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ c...		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
.....	.....	253977 ...	.....	.....	87297 86	.....	.....	322358 40	.....	.....	15775 57	.....
4	0 69	1 ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	0 12	35 ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	0 20	51 ...	.....	.....	.....	259 6	0 30	77 85	.....	.....	.....	.....
2	0 18	74 ...	.....	.....	.....	411 2	0 27	111 01	.....	.....	.....	.....
0	0 66	6...	.....	.....	.....	102 0	1 00	102 00	.....	.....	.....	.....
6	0 34	26 ...	.....	.....	.....	76 6	0 50	38 25	.....	.....	.....	.....
0	0 20	121 ...	.....	.....	.....	608 0	0 30	182 40	.....	.....	.....	.....
0	9 80	49 ...	4518 0	9 80	44 28	516 0	18 00	9 28	.....	.....	.....	.....
7-9	1 05	4059 ...	735 3-9	1 05	772 10	2679 7-9	1 35	3617 70	541½	1 35	731 02	.....
10	0 16	253 ...	1443 10	0 16	231 01	140 0	0 12	16 80	.....	.....	.....	.....
6	0 03	368 ...	.....	.....	.....	12287 6	0 05	614 38	.....	.....	.....	.....
9	9 80	16 ...	1437 9	9 80	14 08	486 3	18 00	8 74	.....	.....	.....	.....
0	15 40	1804 ...	.....	.....	.....	99996 0	18 00	1799 92	.....	.....	.....	.....
10	20 30	4874 ...	.....	.....	.....	241279 10	23 00	5549 41	3402	23 00	78 24	.....
0	35 00	1045 ...	.....	.....	.....	29880 0	30 00	896 40	.....	.....	.....	.....
0	2 45	2009 ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	824 72	4 50	3711 24	.....	.....	.....	.....
17	6 65	373 ...	.....	.....	.....	56 17	8 00	449 36	.....	.....	.....	.....
0	0 03	33 ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
0	0 03	33 ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	0 03	54 ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
0	0 03	4...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	12 00	10...	.....	.....	.....	8467 6	15 00	127 00	.....	.....	.....	.....
0	25 20	5 ...	.....	.....	.....	270 0	40 00	108 00	.....	.....	.....	.....
0	0 00½	4...	.....	.....	.....	93670 0	0 00½	468 35	.....	.....	.....	.....
0	1 57	23...	.....	.....	.....	14059 0	2 25	316 32	.....	.....	.....	.....
0	0 11	33...	.....	.....	.....	3080 0	0 11	338 80	.....	.....	.....	.....
2	1 57	122...	637 59	1 57	1001 01	113557 0	2 00	2271 14	.....	.....	.....	.....
0	0 01	78 ...	.....	.....	.....	78533 0	0 01	785 33	.....	.....	.....	.....
0	0 01	78...	.....	.....	.....	78533 0	0 01	785 33	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	88 0	0 02	1 76	.....	.....	.....	.....
eet.						squares ft.						
72	3 50	198...	.....	.....	.....	586 90	5 00	2934 50	.....	.....	.....	.....
68	5 25	135...	.....	.....	.....	297 38	9 00	2676 42	.....	.....	.....	.....
6	0 17	254...	.....	.....	.....	15660 6	0 20	3132 10	.....	.....	.....	.....
0	0 34	35...	.....	.....	.....	1050 0	0 40	420 00	.....	.....	.....	.....
0	0 04	12...	.....	.....	.....	316 0	0 06	18 96	.....	.....	.....	.....
0	0 14	5 ...	.....	.....	.....	40 0	0 20	8 00	.....	.....	.....	.....
6	0 09	50...	.....	.....	.....	555 6	0 09	50 00	.....	.....	.....	.....
0	3 50	171...	.....	.....	.....	49539 6	5 00	2476 97	.....	.....	.....	.....
0	0 14	582...	.....	.....	.....	41832 0	0 20	8366 40	.....	.....	.....	.....
0	0 21	65...	.....	.....	.....	304 0	0 30	91 20	.....	.....	.....	.....
0	0 10	93...	.....	.....	.....	9591 0	0 15	1438 65	.....	.....	.....	.....
.....	.....	288...	.....	.....	89360 34	.....	.....	366358 37	.....	.....	16584 83	.....

SCHE

DETAILS of Work required for the completion

No.	DESCRIPTION.		Total Quantities included in Contract		
			Quantities.	Rate.	Amount.
				$ cts.	$ cts.
	Brought forward				288360 04
145	¾ Pierced panel work	super. ft.	716 8	0 38	270 03
146	1¼ angle beads	linl. ft.	4178 0	0 03	125 34
147	2½ rolls for lead	do	2768 0	0 02	55 36
148	2½ inch hip and ridge rolls, including irons	do	1344 0	0 03	40 32
149	1½ " pine treads, with rounded and moulded nosings to raised floors of houses	supl. ft.	9753 0	0 05	487 65
150	1 inch risers to do	do	2094 0	0 05	62 82
151	2¼ " wrought and cut strings to do	do	680 0	0 06	40 80
152	3 " dovetailed, tongued and grooved cisterns	do	2160 0	0 12	259 20
153	3 " do do do	do	1856 0	0 10	185 60
154	Forming bottom of baths	F. B. M.	336 0		5 00
155	Step-ladders, 12 ⋈ 3 sides, 9 ⋈ 2½ tread, with handrails and ballisters	No of steps	687 0	0 40	274 80
156	⅞ inch matched sheeting	sup. ft.	2095 0	0 03½	73 32
157	1 " framed and boxed casings to pipes	do	1849 0	0 06	110 94
158	1½ " wrought, framed, moulded and panelled casings, " under washstands in lavatories	do	2138 0	0 25	534 50
159	1½ " wrought linings	do	40 0	0 08	3 20
160	1½ " battened shutters	do	90 0	0 08	7 20
161	6 ⋈ 3 wrought, rebated, and dovetailed frames	linl. ft.	120 0	0 04	4 80
162	6 inch skylight bars, 6 ⋈ 2 head and side, 6 ⋈ 3 bottom rail, 8 ⋈ 3	supl. ft.	6540 0	0 32	2092 80
163	2 " do moulded and rebated	do	6068 0	0 16	970 88
164	2 " pine wrought framed, 4 panel, stop chamfered both sides, doors	do	1645 0	0 28	460 60
165	2 " pine do 6 panel do with ⅞ moulding in panels	do	1628 0	0 30	488 40
166	2 pine do 6 circular headed do	do	5134 4	0 30	1540 32
167	2½ " white oak do 6 panel do moulded, double hung	do	650 6	0 60	390 36
168	2½ " do 6 raised panels, do	do	144 0	0 90	129 60
169	3 " do 12 deeply moulded, 1 member carved do	do	425 0	1 25	531 25
170	Carved caps to do, 1.3 ⋈ 0.9	No.	20 0	0 75	15 00
171	3 inch white oak panel over doors, solid for carving	supl. ft.	75 0	1 25	93 75
172	1 ⋈ 3 pine, wrought, rebated, and chamfered frames	linl. ft.	1015 0	0 05	50 75
173	6 ⋈ 3 do do and double stop chamfered do	do	3654 6	0 09	328 91
174	6 ⋈ 4 do do circular do	do	996 0	0 12	119 52
175	6 ⋈ 3 do moulded transom	do	456 4	0 07	31 94
176	6 ⋈ 4 white oak, wrought and rebated frames	do	253 0	0 15	37 95
177	6 ⋈ 4 do do circular do	do	125 0	0 25	31 25
178	6 ⋈ 6 do wrought, rebated, and chamfered do	do	180 0	0 25	45 00
179	6 ⋈ 6 do do circular	do	70 0	0 38	26 60
180	6 ⋈ 6 do moulded transom	do	50 0	0 30	15 00
181	Small dormers, complete, as per specification	No.	86 0	3 00	258 00
182	Large dormers, do do	do	42 0	12 00	504 00
183	Circular-headed, 2 inch moulded double sash, in 4 ⋈ 5 wrought, rebated, chamfered and moulded frames, with moulded transom and ornamental carved brackets, proper boxed inside frames, patent lines, brass axle pulleys, iron weights and best sash fastener, complete with two venetian blinds, wrought, framed and moulded,				
	Carried over				299062 73

SCHEDULE D.

red for the completion of Parliament Buildings.—*Continued.*

ntities included in Contract.			Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
						Contract and Additional Work.			Work for Heating and Venti'n.			
s.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
...	...	288360 04	...	...	89360 34	...	...	366358 87	...	...	16584 83	...
8	0 38	270 03										
0	0 03	125 34	710 8	0 50	355 33	...	...	...	...	...	...	...
0	0 02	55 36	4338 0	0 04	173 52	...	...	...	...	...	...	...
0	0 03	40 32	2768 0	0 03	83 04	...	...	...	...	...	...	...
			1441 6	0 07	100 90	...	...	...	...	...	...	...
0	0 05	487 63										
0	0 05	62 82	9753 0	0 07½	731 47	...	...	...	...	...	...	...
0	0 06	40 80	2084 0	0 05	104 70	...	...	...	...	...	...	...
0	0 12	259 20	680 0	0 09	61 20	...	...	...	...	...	...	...
0	0 10	185 68	2160 0	0 20	432 00	...	...	...	...	...	...	...
0	...	5 00	1856 0	0 15	278 40	...	...	...	...	...	...	...
			336 0	...	8 00	...	...	...	...	...	...	...
0	0 40	274 80										
0	0 03½	73 32	687 0	0 50	343 50	...	...	...	...	...	...	...
0	0 06	110 94	2095 0	0 04	83 80	...	...	...	...	...	...	...
			1849 0	0 08	147 92	...	...	...	...	...	...	...
0	0 25	534 50										
0	0 08	3 20	2138 0	0 40	855 20	...	...	...	...	...	...	...
0	0 08	7 20	40 0	0 12	4 80	...	...	...	...	...	...	...
0	0 04	4 80	90 0	0 10	9 00	...	...	...	...	...	...	...
			120 0	0 06	7 20	...	...	...	...	...	...	...
0	0 32	2092 80										
0	0 16	970 88	6540 0	0 50	3270 00	...	...	...	...	...	...	...
			6068 0	0 25	1517 00	...	...	...	...	...	...	...
0	0 28	460 60										
			2653 0	0 25	663 25	...	...	...	...	...	...	...
0	0 30	488 40										
4	0 30	1540 30	1628 0	0 28	455 84	...	...	...	...	...	...	...
			5384 4	0 35	1884 51	...	...	...	...	...	...	...
6	0 60	390 30										
0	0 90	129 60	650 6	0 80	520 40	...	...	...	...	...	...	...
			144 0	1 00	144 00	...	...	...	...	...	...	...
0	1 25	531 25										
0	0 75	15 00	425 0	1 50	637 50	...	...	...	...	...	...	...
0	1 25	93 75	20 0	1 00	20 00	...	...	...	...	...	...	...
0	0 05	50 75	75 0	1 50	112 50	...	...	...	...	...	...	...
6	0 09	328 91	1831 0	0 08	146 48	...	...	...	...	...	...	...
0	0 12	119 52	3750 6	0 12	450 06	...	...	...	...	...	...	...
4	0 07	31 94	1048 0	0 18	188 64	...	...	...	...	...	...	...
0	0 15	37 95	482 4	0 12½	60 29	...	...	...	...	...	...	...
0	0 25	31 25	253 0	0 20	50 60	...	...	...	...	...	...	...
0	0 25	45 00	125 0	0 30	37 50	...	...	...	...	...	...	...
0	0 38	26 60	180 0	0 30	54 00	...	...	...	...	...	...	...
0	0 30	15 00	70 0	0 45	31 50	...	...	...	...	...	...	...
0	3 00	258 00	50 0	0 40	20 00	...	...	...	...	...	...	...
0	12 00	504 00	88 0	6 00	528 00	...	...	...	...	...	...	...
			42 0	32 00	1344 00	...	...	...	...	...	...	...
...	...	299063 71	...	...	89360 34	...	...	382274 42	...	...	16584 83	...

SCHE

DETAILS of Work required for completio

No.	DESCRIPTION.		Total Quantities included in Contra		
			Quantities.	Rate.	Amount.
				$ cts.	$ c
	Brought forward				299062
	upper part fixed—lower part hung to transom, with proper rollers so as to slide into walls	supl. ft.	7833 5	0 85	6654
184	Do do without venetian blinds	do	678 10	0 70	475
185	Circular-headed, frame and double, 2 inch fan lights	do	113 11	0 70	79
186	2 inch do moulded sash and frame	do	90 6	0 35	31
187	2 " double sash and frame	do	812 6	0 70	568
188	2 " fan lights, moulded	do	694 0	0 15	104
189	1½ " framed, moulded and panelled jamb linings	do	3227 3	0 25	806
190	1 " chamfered architraves	do	1260 0	0 10	126
191	1 " do circular	do	33 4	0 15	5
192	2 " stop chamfered architraves, with 2½ bead roll to finish in block at base	do	6355 5	0 13	826
193	2 " do do Circular do	do	2457 8	0 19	466
194	2 " tracery to glazed partition	do	93 9	0 50	46
195	2 " moulded window boards	do	1332 6	0 07	93
196	Carving 2½ cable moulding to architraves	lin. ft.	3447 0	0 05	172
197	Do do circular do	do	1339 6	0 07	93
198	1½ " panelled and moulded closet front	sup. ft.	290 0	0 20	58
199	2 " do do do	do	176 0	0 25	44
200	2 " do do do dado	do	160 0	0 25	40
201	1 " wrought, moulded and quatrefoiled panelled gallery front	do	518 0	0 52	269
202	6 ⋈ 4 moulded capping to do	lin. ft.	444 0	0 12	53
203	6 ⋈ 4 do walnut do, polished	do	444 0	0 25	111
204	5 " oak moulded capping	do	202 0	0 10	20
205	2½ " oak handrail	do			
205	3 " oak do	do			
206	3½ round do, polished and fastened to wall by suitable iron brakets	do	52 6	0 26	13
207	5 x 3 moulded do, polished	do	436 0	0 26	113
208	1½ " white oak seat and riser to W. C.	sup. ft.	441 0	0 20	88
209	1½ " do flaps to do	do	252 0	0 20	50
210	1½ " do moulded bath front	do	36 0	0 25	9
211	1 shelf on bearer	do	1002 0	0 06	60
212	Cloak rail and pegs	lin. ft.	5 0	0 06	30
213	Holes cut and dished to W. C.	No.	42 0	0 15	6
214	Beaded handle holes	do	42 0	0 15	6
115	Shutters formed in pipe casings	do	58 0	0 25	14
216	Doors formed in lavatory enclosures	do	14 0		
217	Fixing locks to doors	do	324 0	0 30	97
217	Lift apparatus, with pullies, cords and weights complete	do			
218	2½ inch brass butt hinges and screws	pairs.	114 0	0 20	22
219	4 " do do	do	311 0	0 50	155
220	Patent saving hinges	do	20 0	20 00	400
221	6 inch Brass butts and screws	do	21 0	1 00	21
222	Iron pivot hinges	sets.	4 0	4 00	16
223	Long brass flush bolts	No.	20 0	3 50	70
234	Brass knobs	do	58 0	0 10	5
235	Tarnbuckles	do	70 0	0 10	7
236	Ornamented enamelled ware handles	do	40 0	1 50	6
237	Hooks to step-ladders	do	44 0	0 10	4
238	Door locks				
239	Melbourne duchess slating, 2 copper nails (5 lb. to the thousand) to each slate	square.	683 87	6 70	4581
	Carried over				315993

SCHEDULE D.

of Parliament Buildings.—*Continued.*

Contract work executed.			ESTIMATE FOR COMPLETION.						Total.
			Contract and Additional Work.			Work for Heating and Venti'n.			
Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
.....	.....	89360 34	.....	.....	382274 42	.....	.....	16584 83	.....
.....	.....	.....	8399 9	1 25	10499 68	.....	.....	.....	.....
.....	.....	.....	807 9	0 95	767 36	.....	.....	.....	.....
.....	.....	.....	113 11	0 80	91 13	.....	.....	.....	.....
.....	.....	.....	90 6	0 55	49 77	.....	.....	.....	.....
.....	.....	.....	812 6	0 80	650 00	.....	.....	.....	.....
.....	.....	.....	789 0	0 25	197 25	.....	.....	.....	.....
.....	.....	.....	4495 1	0 25	1123 77	1712 3	0 25	482 06	.....
.....	.....	.....	1895 6	0 12½	236 94	.....	.....	.....	.....
.....	.....	.....	76 8	0 18	13 80	.....	.....	.....	.....
.....	.....	.....	6620 8	0 20	1324 13	.....	.....	.....	.....
.....	.....	.....	2571 3	0 30	771 37	.....	.....	.....	.....
.....	.....	.....	93 9	0 75	70 31	.....	.....	.....	.....
.....	.....	.....	1439 0	0 09	129 51	.....	.....	.....	.....
.....	.....	.....	3575 0	0 08	286 00	.....	.....	.....	.....
.....	.....	.....	1411 6	0 12	169 38	.....	.....	.....	.....
.....	.....	.....	290 0	0 20	58 00	.....	.....	.....	.....
.....	.....	.....	176 0	0 25	44 00	.....	.....	.....	.....
.....	.....	.....	180 0	0 25	45 00	.....	.....	.....	.....
.....	.....	.....	518 0	0 80	414 40	.....	.....	.....	.....
.....	.....	.....	444 0	0 20	88 80	.....	.....	.....	.....
.....	.....	.....	444 0	0 40	177 60	.....	.....	.....	.....
.....	.....	.....	202 0	0 15	30 30	.....	.....	.....	.....
.....	.....	.....	67 0	0 30	20 10	.....	.....	.....	.....
.....	.....	.....	302 6	0 35	105 88	.....	.....	.....	.....
.....	.....	.....	52 6	0 40	21 00	.....	.....	.....	.....
.....	.....	.....	436 0	0 40	174 40	.....	.....	.....	.....
.....	.....	.....	441 0	0 30	132 30	.....	.....	.....	.....
.....	.....	.....	252 0	0 30	75 60	.....	.....	.....	.....
.....	.....	.....	36 0	0 35	12 60	.....	.....	.....	.....
.....	.....	.....	1002 0	0 10	100 20	.....	.....	.....	.....
.....	.....	.....	5 0	0 10	0 50	.....	.....	.....	.....
.....	.....	.....	42 0	0 20	8 40	.....	.....	.....	.....
.....	.....	.....	42 0	0 20	8 40	.....	.....	.....	.....
.....	.....	.....	58 0	0 40	23 20	.....	.....	.....	.....
.....	.....	.....	14 0	.....	.....	.....	.....	.....	.....
.....	.....	.....	378 0	0 40	151 20	.....	.....	.....	.....
.....	.....	.....	6 0	40 00	240 00	.....	.....	.....	.....
.....	.....	.....	114 0	0 25	28 50	.....	.....	.....	.....
.....	.....	.....	363 0	0 75	272 25	.....	.....	.....	.....
.....	.....	.....	20 0	30 00	600 00	.....	.....	.....	.....
.....	.....	.....	21 0	1 50	31 50	.....	.....	.....	.....
.....	.....	.....	4 0	6 00	24 00	.....	.....	.....	.....
.....	.....	.....	20 0	5 00	100 00	.....	.....	.....	.....
.....	.....	.....	58 0	0 12½	7 25	.....	.....	.....	.....
.....	.....	.....	70 0	0 15	10 50	.....	.....	.....	.....
.....	.....	.....	40 0	2 00	80 00	.....	.....	.....	.....
.....	.....	.....	44 0	0 20	8 80	.....	.....	.....	.....
.....	.....	.....	378 0	3 00	1134 00	.....	.....	.....	.....
.....	.....	.....	squares ft. 688 62	8 50	5853 27	.....	.....	.....	.....
.....	.....	89360 34	.....	.....	398736 77	.....	.....	17066 89	.....

SCH

DETAILS of Work required for completio

No.	DESCRIPTION.		Total Quantities included in Contra		
			Quantities.	Rate.	Amount
				$ cts.	$ c
	Brought forward				315993 1
240	Melbourne duchess slating, 3 nails to each slate	squares.	125.92	6 70	843
241	Mortar under slates	do	376.58	0 50	188
242	No. 24 galvanized iron steps and ridges	sup. feet.	3467 10	0 19	658
243	do do vallies	do	4708 2	0 16	753
244	do do flashings	do	3750 0	0 16	600
245	Galvanized iron and other fire-proof material for venti-ducts in roof	do			
246	2 Coat plastering on lath	sup. yds.	4537 5-9	0 12	544
247	3 do do to ceilings set white	do	2011 0	0 19	382
248	3 do do partitions do	do	16 0	0 18	2
249	3 do do on walls	do	4575 0	0 15	686
250	3 do do on lath, hard set with marble dust to ceilings	do	4362 2-9	0 22	959
251	3 do do to partitions	do	707 0	0 22	155
252	3 do do on walls	do	28448 6-9	0 18	5120
253	1½ do Portland cement on concrete floors	do	12793 4-9	0 56	7164
254	3 Coats lime-washing	do	1104 0	0 03	33
255	White glazed earthenware tiles	sup. feet.	4613 0	0 30	1383
256	Portland cement skirtings, 6 inches high, chamfered	lin'l feet	1509 0	0 09	135
257	do do 10 " do moulded	do	570 0	0 15	85
258	do do 15 " do	do	192 0	0 22	42
259	Moulded cornice with 2 enrichments 18 inches girth	do	2764 0	0 30	829
260	do do do 20 " do	do	188 0	0 31	58
261	do do do 24 " do	do	196 0	0 37	72
262	Cast iron work	cwt.	100 2 25	3 15	317
263	do ornamental do	do	84 0 0	5 00	420
264	Hoop iron bond	do	30 0 0	5 00	150
265	Wrought iron in cramps	do	3 1 13	10 00	33
266	do chain bond	do	60 3 10	7 00	425
267	do bolts and straps	do	102 3 1	12 60	1294
268	do saddle bars and stanchions	do	96 1 3	9 00	866
269	do ornamental strap hinges	do	14 1 6	17 50	251
270	do 17 doors	do	118 0 27	12 60	1489
271	Terminal to main tower, say				
272	Steps in circular iron staircase, each step containing 208 lbs. cast iron and 14 lbs. wrought	No.	35 0	12 00	420
273	Wrought iron casements	do	32 0	14 00	448
274	Cast iron air bricks	do	20 0	0 20	4
275	Chubbs locks to iron doors	do	15 0	20 00	300
276	Rolled iron joists	tons.	215 9 1 13	115 00	24773
277	4 coats best oil colors	sup. yds.	5674 4 9	9 14	794
278	Clean stained and twice varnished to pine	do	22668 3-9	0 11	2493
279	Twice oiling to oak floors	do	3296 4-9	0 07	230
280	Twice oiling and twice varnishing to oak	do	741 2-9	0 11	81
281	Finishing in Chinese blue	do	120 0	0 15	18
282	Gilding	inches.	41400 0	0 01	414
283	German sheet glass	sup. feet.	3107 7	0 12½	388
284	Chance's best 26 oz. sheet glass	do	10755 4	0 21	2258
285	do do ground	do	5303 0	0 28	1484
286	Chances 30 oz. rough glass	do	5995 0	0 25	1498
287	British plate glass, polished	do	466 0	0 85	396
288	Rough plate, ½ inch thick	do	32 0	0 75	24
289	Diapered glass, of the value of 4s. per foot, leaded up with strong church lead	do	3481 1	1 00	3481
	Carried over				381458

SCHEDULE D.

required for completion of Parliament Buildings—*Continued.*

Quantities included in Contract work executed.			Contract work executed.			ESTIMATE FOR COMPLETION. Contract and Additional Work.			ESTIMATE FOR COMPLETION. Work for Heating and Venti'n.			Total.
ties.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
.....	.....	315993 11	.....	.....	89360 34	.....	.....	398736 77	.....	.....	17066 89	.....
5.92	6 70	843	.....	.....	.....	125.92	9 00	1133 28	.....	.....	.....	.....
6.58	0 50	188	.....	.....	.....	376.58	0 75	282 43	.....	.....	.....	.....
7 10	0 19	658	.....	.....	.....	4045 4	0 20	809 06	.....	.....	.....	.....
3 2	0 16	753	.....	.....	.....	8458 2	0 25	2114 54	.....	.....	.....	.....
0 0	0 16	600	.....	.....	.....	3750 0	0 40	1500 00	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	27841 0	0 40	11136 40	.....
5-9	0 12	544	.....	.....	.....	4537 5-9	0 15	680 63	1056 0	0 15	158 40	.....
0	0 19	382	.....	.....	.....	2711 4-9	0 21	569 40	.....	.....	.....	.....
0	0 18	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
0	0 15	686	.....	.....	.....	6029 0	0 17	1024 93	.....	.....	.....	.....
2-9	0 22	959	.....	.....	.....	4362 2-9	0 35	1526 77	.....	.....	.....	.....
0	0 22	155	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6-9	0 18	5120	.....	.....	.....	29155 6-9	0 30	8746 70	.....	.....	.....	.....
4-9	0 56	7164	.....	.....	.....	13633 4-9	0 75	10225 08	.....	.....	.....	.....
0	0 03	33	.....	.....	.....	1104 0	0 03	33 12	.....	.....	.....	.....
0	0 30	1383	.....	.....	.....	4613 0	0 40	1845 20	.....	.....	.....	.....
0	0 09	135	.....	.....	.....	1769 0	0 10	176 90	.....	.....	.....	.....
0	0 15	85	.....	.....	.....	773 0	0 17	131 41	.....	.....	.....	.....
0	0 22	42	.....	.....	.....	192 0	0 25	48 00	.....	.....	.....	.....
0	0 30	829	.....	.....	.....	2764 0	0 40	1105 60	.....	.....	.....	.....
0	0 31	58	.....	.....	.....	188 0	0 45	84 60	.....	.....	.....	.....
0	0 37	72	.....	.....	.....	196 0	0 55	107 80	.....	.....	.....	.....
25	3 15	317	.....	.....	.....	133 3 3	4 50	601 95	.....	.....	.....	.....
0	5 00	420	.....	.....	.....	149 2 8	6 00	897 42	.....	.....	.....	.....
0	5 00	150	6 2 22	5 00	33 48	.....	.....	.....	.....	.....	.....	.....
13	10 00	33	.....	.....	.....	3 1 13	11 20	37 70	.....	.....	.....	.....
10	7 00	425	6 1 22	7 00	45 13	.....	.....	.....	.....	.....	.....	.....
1	12 60	1294	12 3 11	12 60	161 89	144 1 6	14 00	2020 25	4 2 0	14 00	63 00	.....
3	9 00	866	2 2 19	9 00	24 03	93 2 12	28 00	2621 00	.....	.....	.....	.....
6	17 50	251	.....	.....	.....	14 1 16	28 00	403 00	.....	.....	.....	.....
27	12 60	1489	.....	.....	.....	118 0 27	22 40	2648 60	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	150 00	.....	.....	.....	.....
0	12 00	420	.....	.....	.....	35	15 00	525 00	.....	.....	.....	.....
0	14 00	448	.....	.....	.....	32	7 00	224 00	.....	.....	.....	.....
0	0 20	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
0	20 00	300	.....	.....	.....	15	25 00	375 00	.....	.....	.....	.....
13	115 00	24778	191 16 0 7	115 90	22057 36	101 4 2 22	115 00	11641 99	.....	.....	.....	.....
4-9	9 14	794	.....	.....	.....	5883 8-9	0 25	1470 97	.....	.....	.....	.....
3-9	0 11	2493	.....	.....	.....	23513 0	0 20	4702 60	123 5-9	0 20	24 71	.....
4-9	0 07	230	.....	.....	.....	3296 4-9	0 10	329 65	.....	.....	.....	.....
2-9	0 11	81	.....	.....	.....	741 2-9	0 20	148 24	.....	.....	.....	.....
0	0 15	18	.....	.....	.....	120 0	0 50	60 00	.....	.....	.....	.....
0	0 01	414	.....	.....	.....	41400 0	0 03	1242 00	.....	.....	.....	.....
7	0 12½	388	.....	.....	.....	3195 4	0 20	639 06	.....	.....	.....	.....
4	0 21	2258	.....	.....	.....	11523 4	0 30	3457 00	.....	.....	.....	.....
0	0 28	1484	.....	.....	.....	5303 0	0 40	2121 20	.....	.....	.....	.....
0	0 25	1493	.....	.....	.....	5995 0	0 35	2098 25	.....	.....	.....	.....
0	0 85	396	.....	.....	.....	466 0	1 25	582 50	.....	.....	.....	.....
0	0 75	24	.....	.....	.....	32 0	1 00	32 00	.....	.....	.....	.....
1	1 00	3481	.....	.....	.....	3481 1	1 10	3829 19	.....	.....	.....	.....
.....	.....	381455	.....	.....	111692 23	.....	.....	473740 79	.....	.....	28395 40	.....

SCHE

DETAILS of Work required for completion

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.
	Brought forward				381458 51
298	Sheet lead	cwt.	1297 1 3	7 00	9080 93
299	Lead pipe	do	109 2 9	7 70	843 76
300	Solder	lbs.	1332 0	0 35	466 20
301	1 inch lap welded iron pipe	linl. ft.	240 0	0 12½	30 00
302	2 " do do	do	1695 0	0 30	508 50
303	2 " do do for gas main	do	2256 0	0 30	676 80
304	½ " do do do	do	1200 0	0 25	325 00
305	1 " ¾ in., ½ in., ¾ in. do for branches	do	7582 0	0 12½	947 75
306	Cast iron sinks, 2.11 × 1.5½ × 5¼ deep, with bell trap, complete	No.	7 0	4 00	28 00
307	Queen's ware pan water closet, apparatus complete	do	42 0	17 50	735 00
308	Standing bell-mouths to cistern.	do	12 0	2 00	24 00
309	Patent buoy cocks	do	26 0	4 00	104 00
310	Enamelled iron basins, in enamelled iron shelves	do	52 0	5 00	260 00
311	Copper plugs and washers to do	do	52 0		
312	Patent cocks, white metal taps	do	52 0	1 50	78 00
313	Best enamelled copper baths, with shower attached, with washers waste and traps complete, with hot and cold service	do	2 0	40 00	80 00
314	Hydrants coupling and cocks	do			
315	Bells	do			
316	Gas fittings	do			
	LIBRARY ABOVE PLINTH.				
317	Rubble masonry to level of cornice of main building	toises.	610 51		
318	Do 1st 10 above do do	do	270 45		
319	Do 2nd 10 above do do	do	225 25		
320	Do 3rd 10 above do do	do	216 3		
321	Do 4th 10 above do do	do	25 41		
322	Do 5th 10 above do do	do	16 0		
323	Do 6th 10 above do do	do	36 0		
324	Do 7th 10 above do do	do	21 0		
325					
326	Rough concrete		1422 03	4 20	5972 63
227	Concrete to fire-proof flooring	cub. yd.	214 22	1 58	339 40
328	Limestone facing	do			
329	Nepean facing	sup. yd.	612 5-9	0 52	318 52
330	Pointing to masonry	sup. ft.			
331	Native sandstone for quoins	sup. yd.	874 2-9	0 09	78 68
332	Picked face to do	cub. ft.	1516 0	0 50	758 00
333	Potsdam arches	linl. ft.	2274 0	0 17	386 58
334	Bricks laid in mortar	do			
335	Hollow brick groining	℔ M	939.360 0	7 34	6894 90
336	Chamfer on brick	sup. yd.	1022 6-9	0 87	889 72
337	Limestone in block	linl. ft.	133 0	0 02	2 66
338	Plain face to do	cub. ft.	13016 11	0 15	1952 53
339	Do circular	sup. ft.	3460 5	0 30	1038 13
340	Sunk face	do	5987 11	0 36	2155 65
341	Circular do	do	3618 0	0 36	1302 48
342	Chamfered do	do	780 9	0 50	390 38
343	Circular moulded	do	3397 2	0 36	1222 98
344	Carved	do	197 4	0 75	148 00
345	Moulded stops	do	64 0	1 80	115 20
		do	56 0	0 25	14 00
	Carried over				419626 83

SCHEDULE D.

quired for completion of Parliament Buildings.—*Continued.*

Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
			Contract and Additional Work.			Work for Heating and Venti'n.			
Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
		111682 23			473740 79			28395 40	
			1297 1 3	14 00	18161 87				
			109 2 9	14 00	1534 13				
			1332 0	0 50	666 00				
			240 0	0 15	36 00				
			1695 0	0 35	593 25				
			2256 0	0 35	789 60				
			1300 0	0 30	390 00				
			7852 0	0 15	1137 30				
			7 0	6 00	42 00				
			42 0	40 00	1680 00				
			12 0	2 50	30 00				
			26 0	5 00	130 00				
			52 0	7 50	390 00				
			52 0						
			52 0	2 00	104 00				
			2 0	50 00	100 00				
			13 0	12 50	162 50				
			150 0	5 00	750 00				
					2440 00				502877 44
						Add heat	ing and	ventilation	28395 40
					Total co	mpletion ex	clusive	of Library	531272 84
			1009 27	7 50	7571 25				
			312 13	8 44	2635 31				
			279 29	9 48	2650 01				
			328 31	10 66	3502 60				
			155 10	12 00	1862 22				
			136 36	13 50	1845 00				
			99 0	15 18	1502 82				
			97 34	17 08	1667 51				
			214 22	1 50	322 22				
			79 11	4 00	317 63				
			6794 0	0 27	1834 38				
			1008 3-9	0 20	201 66				
			1548 0	0 44	681 12				
			2286 0	0 20	457 20				
			1054 8	0 55	580 06				
			1100483 0	12 50	13756 03				
			1022 6-9	3 50	3579 22				
			133 0	0 05	6 65				
			28629 2	0 48	13742 00				
			16722 7	0 45	7547 66				
			8178 7	0 56	4580 00				
			3506 0	0 56	1963 36				
			780 9	0 79	616 79				
			3397 2	0 56	1902 41				
			197 4	1 24	244 69				
			70 3	2 70	189 67				
			600 0	0 35	210 00				
		111682 23			75969 47				531272 84

SCHE

DETAILS of Work required for completion

No.	DESCRIPTION.		Total Quantities included in Contract		
			Quantities.	Rate.	Amount.
				$ cts.	$ cts
	Brought forward.....				419626 82
345	Ohio stone.....	cub. ft.	27637 10	0 45	12437 02
346	Plain face to do.....	sup. ft.	10131 0	0 22	2228 82
347	Circular plain face to Ohio stone.....	sup. ft.	3172 0	0 30	951 60
348	Sunk work.....	do	8515 1	0 35	2980 25
349	Sunk circular.....	do	951 3	0 50	475 62
350	Chamfered	do	2295 0	0 31	711 45
351	Moulded work.....	do	1743 7	0 48	836 92
352	Do circular	do	3193 3	0 31	989 90
353	Do do undercut.....	do			
354	Carved work.....	do	614 2	0 76	466 72
355	Moulded Stops.....	No.	238 0	0 20	47 60
356	Stops	do	16 0	0 20	3 20
357	Dressing and cleaning cut stone.....				
358	3 inch rubbed Ohio hearths.....	sup. ft.	25 0	0 30	7 50
359	3 " Ohio flagging.....	do	56 0	0 12½	7 00
360	3 " Nepean under joists.....				
361	6 " Nepean steps.....	do	145 0	0 25	36 25
362	Plain face to do	do	232 0	0 17	39 44
363	Slate dowels.....	No.	392 0	0 03	11 76
364	¾ inch slate to urinals	sup. ft.	61 9	0 18	11 13
365	1 " do do	do	27 9	0 20	5 58
366	6 x 8 do do	lin. ft.	12 0	0 66	7 92
367	Circular sunk do	sup. ft	9 0	0 34	3 06
268	Setting grates.....	No.	3 0	1 00	3 00
369	Chimney pieces, value $25 00.....	do	3 0	25 00	75 00
370	Centreing.....	sup. yds.	15 0	1 05	15 75
371	Centreing to dome and lantern.....	do	1603 0	1 05	1683 15
372	Boarding and concrete.....	square.			
373	1½ x 1½ tirrings for ceilings.....	lin. ft.			
374	Wood lintels.....	B. M.	69 5	9 80	0 67
375	9 x 3 wall plates.....	lin. ft.	1746 0	0 03	52 38
376	Framed lumber in roof.....	F. B. M.	44289 0	20 30	899 06
377	Ceiling joists, &c.....	do	3080 9	15 40	47 44
378	1½ roof boarding.....	square.	19636 8	2 45	481 03
379	1½ do tongued and grooved.....				
380	Double 1¼ boarding to deck flat, upper thickness tongued and grooved.....	do	13 68	6 65	90 97
381	1½ rolls for lead.....	lin. ft.	608 0	0 02	12 16
382	2½ rolls.....	do	852 0	0 03	25 56
383	4 x 2 in quartered partitions.....	do	32 0	0 03	0 96
384	4 x 3 do	do	142 0	0 03	4 26
385	2 x 1 slate battens	do	10731 0	0 00½	53 65
386	1½ inch pine floors, grooved and tongued as before	squares.	31 56	3 50	110 46
387	12 " oak do do do	do	60	5 25	3 15
388	2 " oak sills.....	sup. ft.	60 0	0 06	3 60
389	1½ " attened trap to roof.....	do	15 0	0 08	1 20
390	6 x 3" bwrought and rebated frame	lin. ft.	16 0	0 04	0 64
391	1 " wrought casings	sup. ft.	97 0	0 06	5 82
392	1½ " panelled and moulded do.....	do	40 0	0 25	10 00
393	2 " dove-tailed, tongued and grooved cisterns.....	do	272 0	0 10	27 20
394	1½ " red pine skirtings, moulded 11 high.....	lin. ft.	749 0	0 17	127 33
395	5-8 " oak do do do	do	28 0	0 04	1 12
396	2 " 4-panelled chamfered pine door.....	sup. ft.	70 0	0 28	19 60
	Carried over.....				445640 62

SCHEDULE D.

equired for completion of Parliament Buildings.—*Continued.*

antities included in Contract			Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
						Contract and Additional Work.			Work for Heating and Venti'n.			
es.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts		$ cts.			$ cts.	$ cts.		$ cts	$ cts	$ cts.
.....	.....	419626 83	.....	.....	111682 23	.....	.....	75949 47	.....	.....	.....	531272 04
10	0 45	12437 02	.....	.....	.....	44396 1	0 84	37292 71	.....	.....	.....	.....
0	0 22	2228 82	.....	.....	.....	15682 7	0 25	3920 64	.....	.....	.....	.....
0	0 30	951 60	.....	.....	.....	5987 0	0 35	2095 45	.....	.....	.....	.....
1	0 35	2930 25	.....	.....	.....	15523 4	0 40	6209 33	.....	.....	.....	.....
3	0 50	475 62	.....	.....	.....	3181 8	0 50	1590 83	.....	.....	.....	.....
0	0 31	711 45	.....	.....	.....	2878 11	0 31	892 46	.....	.....	.....	.....
7	0 48	836 92	.....	.....	.....	3948 1	0 50	1974 04	.....	.....	.....	.....
3	0 31	989 90	.....	.....	.....	4208 10	0 75	3156 62	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	535 0	0 88	470 80	.....	.....	.....	.....
2	0 76	466 72	.....	.....	.....	1417 4	1 50	2171 00	.....	.....	.....	.....
0	0 20	47 60	.....	.....	.....	238 0	0 50	119 00	.....	.....	.....	.....
0	0 20	3 20	.....	.....	.....	36 0	0 50	18 00	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	300 00	.....	.....	.....	.....
0	0 30	7 50	.....	.....	.....	25 0	0 50	12 50	.....	.....	.....	.....
0	0 12½	7 00	.....	.....	.....	56 0	0 20	11 20	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	382 0	0 12	45 84	.....	.....	.....	.....
0	0 25	36 25	.....	.....	.....	145 0	0 27	39 15	.....	.....	.....	.....
0	0 17	39 44	.....	.....	.....	232 0	0 20	46 40	.....	.....	.....	.....
0	0 03	11 76	.....	.....	.....	392 0	0 06	23 52	.....	.....	.....	.....
9	0 18	11 12	.....	.....	.....	61 9	0 27	16 66	.....	.....	.....	.....
9	0 20	5 55	.....	.....	.....	27 9	0 30	8 32	.....	.....	.....	.....
0	0 66	7 92	.....	.....	.....	12 0	1 00	12 00	.....	.....	.....	.....
0	0 34	3 06	.....	.....	.....	9 0	0 50	4 50	.....	.....	.....	.....
0	1 00	3 00	.....	.....	.....	3 0	2 00	6 00	.....	.....	.....	.....
0	25 00	75 00	.....	.....	.....	3 0	30 00	90 00	.....	.....	.....	.....
0	1 05	15 75	.....	.....	.....	125 7–9 0	1 35	169 80	.....	.....	.....	.....
0	1 05	1683 15	.....	.....	.....	1603 0	2 50	4007 50	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	3216 0	2 00	64 32	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	32 16	0 01	32 16	.....	.....	.....	.....
5	9 80	0 67	.....	.....	.....	69 5	18 00	1 24	.....	.....	.....	.....
0	0 03	52 38	.....	.....	.....	1746 0	0 05	87 30	.....	.....	.....	.....
0	20 30	899 06	.....	.....	.....	48234 0	23 00	1109 38	.....	.....	.....	.....
9	15 40	47 44	.....	.....	.....	28 0	18 00	0 50	.....	.....	.....	.....
8	2 45	481 08	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	208 68	4 50	939 06	.....	.....	.....	.....
3	6 65	90 97	.....	.....	.....	13 68	8 00	109 44	.....	.....	.....	.....
0	0 02	12 16	.....	.....	.....	608 0	0 03	18 24	.....	.....	.....	.....
0	0 03	25 56	.....	.....	.....	964 0	0 07	67 48	.....	.....	.....	.....
0	0 03	0 96	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
0	0 03	4 26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
0	0 00½	53 65	.....	.....	.....	12.111	0 00½	60 55	.....	.....	.....	.....
3	3 50	110 46	.....	.....	.....	31.56	5 00	157 80	.....	.....	.....	.....
0	5 25	3 15	.....	.....	.....	60 0	9 00	5 40	.....	.....	.....	.....
0	0 06	3 60	.....	.....	.....	60 0	0 09	5 40	.....	.....	.....	.....
0	0 08	1 20	.....	.....	.....	15 0	0 10	1 50	.....	.....	.....	.....
0	0 04	0 64	.....	.....	.....	16 0	0 06	0 96	.....	.....	.....	.....
0	0 06	5 82	.....	.....	.....	97 0	0 08	7 76	.....	.....	.....	.....
0	0 25	10 00	.....	.....	.....	40 0	0 40	16 00	.....	.....	.....	.....
0	0 10	27 20	.....	.....	.....	272 0	0 15	40 80	.....	.....	.....	.....
0	0 17	127 33	.....	.....	.....	749 0	0 20	149 80	.....	.....	.....	.....
0	0 04	1 12	.....	.....	.....	28 0	0 06	1 68	.....	.....	.....	.....
0	0 28	19 60	.....	.....	.....	70 0	0 25	17 50	.....	.....	.....	.....
.....	.....	445340 83	.....	.....	111682 23	.....	.....	143568 01	.....	.....	.....	531272 04

SCHE

DETAILS of Work required for completion

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.
	Brought forward.....				445640 82
397	2 inch 6 panelled chamfered pine door.....	sup. ft.	170 7	0 30	51 17
398	2½ 6 do moulded white oak, double-hung.....	do	32 0	0 60	19 20
399	6 x 3 pine wrought, reb'd and chamfered frame.....	lin. ft.	129 6	0 09	11 66
400	6 x 4 white oak, do do	do	14 0	0 15	2 10
401	6 x 4 do circular, do do	do	5 0	0 25	1 25
402	2 double sashes, frames and Venetian blinds, circular headed, as before.....	sup. ft.	837 0	0 85	711 45
403	2 inch circular headed double starlights	do	21 0	0 70	14 70
404	2 " moulded window boards.....	do	99 0	0 07	6 93
405	1¾ " jamb linings, as before	do	490 2	0 25	122 54
406	1½ " do circular.....	do	132 0	0 37	48 84
407	1 " chamfered architrave.....	do	44 0	0 10	4 40
488	2 architraves, with 2½ inch bead roll.....	do	465 3	0 13	60 48
409	2 do do circular	do	280 0	0 19	53 20
410	Carving cable moulding to 2½ inch bead.....	lin. ft.	133 4	0 05	6 66
411	do do circular.....	do	124 0	0 07	8 68
412	1½ inch white oak seat riser and flap to W. C	sup ft.	66 0	0 20	13 20
413	¾ wrought matched and chamfered pine boarding to ceiling.....	squares.	1990 0	3 50	69 65
414	Pine moulding to do.....	do	853 0	0 14	119 42
415	3 inch pine handrail.....	lin. ft.	58 0	0 06	3 48
416	3½ " white oak handrail, published, including iron brackets.....	do	162 6	0 26	42 25
417	2½ " brass butt hinges and screws.....	pairs.	10 0	0 20	2 00
418	4 " do do do	do	11 0	0 50	5 50
419	16 " T hinges and screws.....	do	1 0	0 50	0 50
420	Turnbuckles	No.	2 0	0 10	0 20
421	12 inch barrel bolts.....	do	1 0	0 20	0 20
422	Holes cut and dished to W. C.....	do	4 0	0 15	0 60
423	Beaded handle holes to do	do	4 0	0 15	0 60
424	Shutters in pipe casings.....	do	4 0	0 25	1 00
425	Doors to lavatory enclosures.....	do	2 0		
426	Fixing door locks.....	do	20 0	0 30	6 00
427	Door locks.....	do			
428	Melbourne Duchess Slating, nailed with three nails to each slate.....	squares.	93 33	6 70	625 31
429	Mortar under slates.....	do	93 33	0 50	46 66
400	No. 24 galvanized iron hips.....	sup. ft.	1324 5	0 19	251 64
431	Do do vallies.....	do	411 8	0 16	65 86
432	Do do flashings	do	1024 0	0 16	163 84
433	Best F. C. Tin, laid complete.....	squares.	3104 0	11 00	341 44
434	3 coats plaistering on lath hard set to ceiling.....	sup. yds.	134 2-9	0 22	29 53
435	3 do do do partitions.....	do	119 0	0 22	26 18
436	3 do do do wells.....	do	4123½ 0	0 18	742 20
437	Double-faced and moulded Portland Cement, 16 ins. high	lin. ft.	227 9	0 20	45 55
438	White glazed tiles.....	sup. ft.	523 0	0 30	156 90
439	Cast iron.....	cwt.	2.3.7 0	3 15	8 85
440	Ornamental do	do	18.3.1 0	5 00	93 79
441	Wrought iron in chain bond.....	do	180.1.0 0	7 00	1261 75
442	Do in straps and bolts.....	do	1.1.0 0	12 60	15 75
443	Do in ornamental hinges and Finials.....	do	0.1.12 0	17 50	6 25
444	Do vane, complete.....	No.	1 0		140 00
445	Do in stanchions, saddle bars, &c.....	cwt.	35.1.14 0	9 00	318 37
	Carried over.....				451368 55

SCHE

quired for completion

titities included in Contract.

Rate.	Amount.
$ cts.	$ cts.
.....	445640 82
0 30	51 17
0 60	19 20
0 09	11 66
0 15	2 10
0 25	1 25
0 85	711 45
0 70	14 70
0 07	6 93
0 25	122 54
0 37	48 84
0 10	4 40
0 13	60 48
0 19	53 20
0 05	6 66
0 07	8 68
0 20	13 20
3 50	69 65
0 14	119 42
0 06	3 48
0 26	42 25
0 20	2 00
0 50	5 50
0 50	0 50
0 10	0 20
0 20	0 20
0 15	0 60
0 15	0 60
0 25	1 00
.....	.....
0 30	6 00
.....	.....
6 70	625 31
0 50	46 66
0 19	251 64
0 16	65 86
0 16	163 84
11 00	341 44
0 22	29 53
0 22	26 18
0 18	742 20
0 20	45 55
0 30	156 90
3 15	8 85
5 00	93 79
7 00	1261 75
12 60	15 75
17 50	6 25
.....	140 00
9 00	318 37
.....	451368 55

ULE D.

f Parliament Buildings.—*Continued,*

Contract Work Executed.			ESTIMATE FOR COMPLETION						Total.
			Contract and Additional Work.			Work for Heating and Venti'n.			
Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
.....	.....	111682 23	.....	.....	143568 01	.....		.....	531272 04
.....	.....	.....	170 7	0 28	47 76	.....	.....	.....	.....
.....	.....	.....	32 0	0 80	25 60	.....	.....	.....	.....
.....	.....	.....	129 6	0 12	15 54	.....	.....	.....	.....
.....	.....	.....	14 0	0 20	2 80	.....	.....	.....	.....
.....	.....	.....	5 0	0 30	1 50	.....	.....	.....	.....
.....	.....	.....	837 0	1 25	1046 25	.....	.....	.....	.....
.....	.....	.....	21 0	0 80	16 80	.....	.....	.....	.....
.....	.....	.....	99 0	0 09	8 91	.....	.....	.....	.....
.....	.....	.....	580 0	0 25	145 04	.....	.....	.....	.....
.....	.....	.....	165 0	0 37	61 05	.....	.....	.....	.....
.....	.....	.....	44 0	0 12½	5 50	.....	.....	.....	.....
.....	.....	.....	465 3	0 20	93 05	.....	.....	.....	.....
.....	.....	.....	280 0	0 30	84 00	.....	.....	.....	.....
.....	.....	.....	133 4	0 08	10 66	.....	.....	.....	.....
.....	.....	.....	124 0	0 12	14 88	.....	.....	.....	.....
.....	.....	.....	66 0	0 30	19 80	.....	.....	.....	.....
.....	.....	.....	1990 0	5 00	99 50	.....	.....	.....	.....
.....	.....	.....	853 0	0 20	170 60	.....	.....	.....	.....
.....	.....	.....	58 0	0 10	5 80	.....	.....	.....	.....
.....	.....	.....	162 6	0 40	65 00	.....	.....	.....	.....
.....	.....	.....	10 0	0 25	2 50	.....	.....	.....	.....
.....	.....	.....	11 0	0 75	8 25	.....	.....	.....	.....
.....	.....	.....	1 0	0 75	0 75	.....	.....	.....	.....
.....	.....	.....	2 0	0 15	0 30	.....	.....	.....	.....
.....	.....	.....	1 0	0 30	0 30	.....	.....	.....	.....
.....	.....	.....	4 0	0 20	0 80	.....	.....	.....	.....
.....	.....	.....	4 0	0 20	0 80	.....	.....	.....	.....
.....	.....	.....	4 0	0 40	1 60	.....	.....	.....	.....
.....	.....	.....	2 0	.....	.....	.....	.....	.....	.....
.....	.....	.....	20 0	0 40	8 00	.....	.....	.....	.....
.....	.....	.....	20 0	3 00	60 00	.....	.....	.....	.....
.....	.....	.....	105 65	9 00	950 85	.....	.....	.....	.....
.....	.....	.....	105 65	0 75	79 23	.....	.....	.....	.....
.....	.....	.....	2921 9	0 20	584 35	.....	.....	.....	.....
.....	.....	.....	411 8	0 25	102 91	.....	.....	.....	.....
.....	.....	.....	1339 0	0 40	535 60	.....	.....	.....	.....
.....	.....	.....	3104 0	16 00	496 64	.....	.....	.....	.....
.....	.....	.....	134 2-9	0 35	46 97	.....	.....	.....	.....
.....	.....	.....	4242½ 0	0 30	1272 70	.....	.....	.....	.....
.....	.....	.....	227 9	0 30	68 32	.....	.....	.....	.....
.....	.....	.....	523 0	0 40	209 20	.....	.....	.....	.....
.....	.....	.....	2.3.7 0	4 50	12 65	.....	.....	.....	.....
.....	.....	.....	18.3.1 0	6 00	112 55	.....	.....	.....	.....
.....	.....	.....	181.2.0 0	14 00	2541 00	.....	.....	.....	.....
.....	.....	.....	76.3.16 0	28 00	2153 00	.....	.....	.....	.....
.....	.....	.....	1 0	.....	140 00	.....	.....	.....	.....
.....	.....	.....	35.1.14 0	28 00	990 50	.....	.....	.....	.....
.....	.....	111682 23	.....	.....	154887 52	.....	.....	.....	531272 04

SCHE

DETAILS of Work required for completion

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.
	Brought forward				451368 55
446	Wrought iron in 8 doors	cwt.	137.0.0 0	12 60	1726 20
447	Cast iron in do	do	20.1.18 0	5 00	102 05
448	Galvanized iron cramps	do	2.1.19 0	10 00	24 19
449	Rolled iron joists	tons.			
450	Twice oiling to oak floors	sup. yds.	6 ¾	0 07	0 46
451	4 coats oil colors	do	319 4-9	0 14	44 73
452	Cleaning, staining, and twice varnishing to pine	do	850 0	0 11	93 50
443	Twice oiling and do to oak	do	20 ¾	0 11	2 27
454	Finishing in Chinese blue	do	42 1-9	0 15	6 31
455	Gilding	inches.	11520 0	0 01	115 20
456	26 oz. Chance's best sheet glass	sup. feet	1231 4	0 21	258 58
457	Diapered glass, of the value of 4s. per foot, leaded up in strong church lead	do	3125 7	1 00	3125 58
458	Lead in sheets	cwt.	118.1.19 0	7 00	828 03
459	Lead pipes	do	3.1.14 0	7 70	25 66
460	Solder	lbs.	120 0	0 35	42 00
461	1¼ inch cap-welded iron piping for gas	lin. feet.	280 0	0 25	70 00
462	1 ¾ ½ ⅜ do do	do	240 0	0 12½	30 00
463	Patent buoy cocks	No.	4 0	4 00	16 00
464	Sets W. C. apparatus, complete	do	4 0	17 50	70 00
465	Enamelled iron basins on enamelled iron shelves	do	6 0	5 00	30 00
466	Copper plugs and washers to do	do	6 0		
467	Patent cocks, with white metal taps	do	6 0	1 50	9 00
468	Bells	do			
469	Gasfitting				
	BOILER HOUSE.				457989 53
470	3 inch drain pipes	linl. yds.			
471	3 " bends	No.			
472	3 " junctions	do			
473	Rubble masonry, to level of cornice of main building	toises.			
474	do to 1st, 10 above do	do			
475	do 2nd, 10 do do	do			
376	do 3rd, 10 do do	do			
477	do 4th, 10 do do	do			
478	do 5th, 10 do do	do			
479	do 6th, 10 do do	do			
480	do 7th, 10 do do	do			
481	do 8th, 10 do do	do			
482	do 9th, 10 do do	do			
483	Nepean facing	sup. ft.			
484	Pointing to do	sup. yds.			
485	Bricks in mortar	M.			
486	Bricks in oil putty	do			
487	Pointing in brick work	sup. yds.			
488	9 inch brick arches	do			
489	3 " block limestone paving	sup. ft.			
490	Rough concrete	cub. yds			
491	Fine do	do			
492	Native sandstone for quoins	cub. ft.			
493	Picked face to do	sup. ft.			
494	Block limestone	cub. ft.			
	Carried over				

SCHEDULE D.

equired for completion of Parliament Buildings.—*Continued.*

antities included in Contract			Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
						Contract and Additional Work.			Work for Heating and Venti'n.			
es.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
.....	.....	451368 85	.....	.....	111682 23	.....	.....	154887 52	.....	.....	.....	531272 04
0	12 60	1726 20	.....	.....	.....	137.0.0 0	22 40	3068 80	.....	.....	.....	.....
0	5 00	102 05	.....	.....	.....	20.1.18 0	6 00	122 46	.....	.....	.....	.....
0	10 00	24 19	.....	.....	.....	2.1.19 0	16 00	38 71	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	9.14.2.5 0	115 00	1119 39	.....	.....	.....	.....
¾	0 07	0 46	.....	.....	.....	6 ¾	0 10	0 67	.....	.....	.....	.....
4-9	0 14	44 72	.....	.....	.....	469 0	0 25	117 25	.....	.....	.....	.....
0	0 11	93 50	.....	.....	.....	850 0	0 20	170 00	.....	.....	.....	.....
¾	0 11	2 27	.....	.....	.....	20 ¾	0 20	4 13	.....	.....	.....	.....
1-9	0 15	6 31	.....	.....	.....	191 6-9	0 50	95 83	.....	.....	.....	.....
0	0 01	115 29	.....	.....	.....	58368 0	0 03	1751 04	.....	.....	.....	.....
4	0 21	258 58	.....	.....	.....	1231 4	0 30	369 40	.....	.....	.....	.....
7	1 00	3125 56	.....	.....	.....	3173 10	1 10	3491 21	.....	.....	.....	.....
0	7 00	828 93	.....	.....	.....	118.1.19 0	14 00	1657 87	.....	.....	.....	.....
0	7 70	25 95	.....	.....	.....	3.1.14 0	14 00	47 25	.....	.....	.....	.....
0	0 35	42 00	.....	.....	.....	120 0	0 50	60 00	.....	.....	.....	.....
0	0 25	70 00	.....	.....	.....	280 0	0 30	84 00	.....	.....	.....	.....
0	0 12½	105 00	.....	.....	.....	240 0	0 15	36 00	.....	.....	.....	.....
0	4 00	16 00	.....	.....	.....	4 0	5 00	20 00	.....	.....	.....	.....
0	17 50	70 00	.....	.....	.....	4 0	40 00	160 00	.....	.....	.....	.....
0	5 00	30 00	.....	.....	.....	6 0	7 50	45 00	.....	.....	.....	.....
0	.....	.....	.....	.....	.....	6 0	.....	.....	.....	.....	.....	.....
0	1 50	9 00	.....	.....	.....	6 0	2 00	12 00	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	13 0	5 00	65 00	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	500 00	.....	.....	.....	.....
		457989 53							Completion		of Library	168923 83
.....	.....	.....	.....	.....	.....	.....	.....	.....				700196 67
.....	.....	.....	.....	.....	.....	.....	.....	.....	23¾ 0	1 25	29 58	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	9 0	1 00	9 00	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	5 0	1 25	6 25	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	110 39	7 50	830 41	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	21 0	8 44	177 34	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	22 4	9 48	209 26	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	22 4	10 66	235 31	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	22 4	12 00	264 88	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	22 4	13 50	298 00	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	22 4	15 18	335 08	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	14 24	17 08	246 71	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	14 24	19 20	277 33	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	14 24	21 60	312 00	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	4845 0	0 27	1308 15	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	646 0	0 20	129 20	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	132500 0	12 50	1656 25	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	81600 0	30 00	2448 00	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	433 0	0 25	108 25	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	42 6-9	1 80	76 80	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	3089 0	0 30	926 70	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	270 0	1 50	405 00	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	187 ¼	4 00	749 33	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	646 0	0 44	284 24	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	969 0	0 20	193 80	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	706 9	0 17	120 15	.....
.....	.....	.....	.....	.....	111682 23	.....	.....	.....	.....	.....	11636 92	700196 67

SCH

DETAILS of Work required for complet

No.	DESCRIPTION.		Total Quantities included in Contr		
			Quantities.	Rate.	Amount
				$ cts.	$
	Brought forward				
495	Plain face to do	sup. ft.			
496	Sunk face to do	do			
497	Circular plain	do			
498	Chamfered face	do			
499	Ohio stone	cub. ft.			
500	Sunk face to do	sup. ft.			
501	1 inch slate louvres	do			
502	4 × 3 pine sleepers in concrete	linl. ft.			
503	2½ inch rolls	do			
504	Boarding under concrete	sup. ft.			
505	Centering	sup. yds			
506	1½ inch framed dado, under windows	sup. ft.			
507	2 " battened doors	do			
508	2¼ " sashes	do			
509	2¼ " do circular heads, including fastenings	do			
510	2 " panelled and moulded doors	do			
511	6 × 4 wrought, rebated, and chamfered frame	linl. ft.			
512	3 × 4 do do circular do	do			
513	4 × 4 do do do do	do			
514	18 inch T. hinges	pairs.			
515	Locks to doors	No.			
516	Wrought iron in girders, rivetted plate	tons.			
517	Rolled iron joists	do			
518	Wrought iron in bond	cwt.			
519	do in skylight	do			
520	German sheet glass, 20 × 12	squares.			
521	do do 12 × 18	do			
522	30 oz. chances sheet, rough	sup. ft.			
523	4 oils, best oil colors	sup. yds			
524	Cleaning, staining, and twice varnishing to pine	do			
525	Portland cement to floor	do			
526	Galvanized iron to flat	sup. ft.			
527	Fixing smoke pipes in ventilating shaft				
	COLD AIR DUCTS AND MAIN DRAIN OUTSIDE BUILDING.				
528	Rubble masonry	cub. yds			
529	Concrete	do			
530	Picked face work	sup. ft.			
531	Picked circular do	do			
532	do do to main drain	do			
533	2 limestone flagging	do			
534	Centering				
535	Termination to N. duct of Library	do			
	Carried over				

SCH[illegible]ULE D.

[illegible] required for complet[illegible] of Parliament Buildings.—*Continued.*

Quantities included in Contr[illegible]			Contract Work Executed.			CONTRACT WORK EXECUTED.						Total.
						Contract and Additional Work.			Work for Heating and Venti'n.			
[illegible]tities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ [illegible]		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
											11636 92	700196 67
									1422 0	0 25	355 50	
									387 8	0 40	155 06	
									49 0	0 35	17 15	
									133 8	0 35	46 78	
									2340 8	0 84	1965 81	
									1072 8	0 40	429 06	
									202 8	0 30	60 80	
									2072 0	0 02	41 14	
									2072 0	0 05	103 60	
									3540 0	2 00	7080 00	
									145 0	1 35	195 75	
									60 0	0 30	18 00	
									52 6	0 12½	6 57	
									213 0	0 30	62 90	
									312 0	0 30	93 60	
									48 0	0 20	9 60	
									160 0	0 10	16 00	
									38 0	0 15	5 70	
									364 0	0 12	43 68	
									2 0	0 75	1 50	
									4 0	1 50	6 00	
									T. c. qr.			
									5.9.2.14	160 00	877 00	
									9.12.1.20	115 00	1106 45	
									2.1.17	14 00	33 62	
									3.3.21	45 00	117 19	
									80 0	0 27	21 60	
									416 0	0 12½	52 00	
									64 0	0 35	22 40	
									115 0	0 25	20 75	
									128 0	0 20	25 60	
									60 4-9	0 75	45 33	
									4924 0	0 18	886 32	
											100 00	
												25728 68
									328 0	2 50	820 00	
									321⅔ 0	1 50	482 50	
									738 5	0 34	251 06	
									870 0	0 80	696 00	
									310 0	0 80	248 00	
									8684 0	0 09	781 56	
									131 0	1 35	176 85	
											200 00	
											3655 97	725925 35

SCHE

DETAILS of Work required for completion

No.	DESCRIPTION.	Total Quantities included in Contract		
		Quantities.	Rate.	Amount.
			$ cts.	$ cts
	Brought forward			
535	Termination to N. duct of Legislative Assembly			
536	do N. do Legislative Council			
537	do E. do do			
538	do W. do Legislative Assembly			
549	do S. do from Tower			
	Total Estimate for completion			

Ottawa, 28th January, 1862.

SCHEDULE D.—PARLIAMENTARY BUILDINGS, OTTAWA.

Summary of Estimate.

	$ cts.	$ cts.
Total amount of work included in contract at Schedule rates	457989 52	
Amount of contract work executed at Schedule rates	111682 23	
ESTIMATE FOR COMPLETION.		
Main building, exclusive of library	502877 44	
Work for heating and ventilation to main building, exclusive of library	28395 40	
		531272 84
Library above plinth		168923 83
Boiler-house		25728 68
Ducts outside building		4755 97
		730681 32
Work prepared on ground	27630 26	
Materials on ground	60894 46	
Materials at brickyard	5474 59	
		93999 31
Total amount required for completion of Parliament Buildings		$636682 01

SCHEDULE D.

of Parliament Buildings.—*Concluded.*

Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
			Contract and Additional Work.			Work for Heating and Venti'n.			
Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts		$ cts.	$ cts.	$ cts.
.....	.....	.....	.....	.....	.....	.....	.....	3655 97	725925 35
.....	.....	.....	.....	.....	.....	.....	.....	200 00	.....
.....	.....	.....	.....	.....	.....	.....	.....	200 00	.....
.....	.....	.....	.....	.....	.....	.....	.....	200 00	.....
.....	.....	.....	.....	.....	.....	.....	.....	500 00	4755 97
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	730,681 32

THOMAS GUNDRY,
JOHN BOWES.

SCHEDULE E.—DEPARTMENTAL BUILDINGS, OTTAWA.

Summary of Contract Works and Works required to finish Eastern Block.

	$ cts.	$ cts.
Total amount of contract at Schedule rates.....	.....	170489 11
Contract work executed..	.....	69614 39
ESTIMATE FOR COMPLETION.		
Main building.....	185444 04	
Works of heating and ventilation.....	24418 01	209862 05
Works prepared on ground..... } Materials on ground..... }	43202 45	
Materials at brickyard.....	1729 77	$44932 22
Total amount required for completion of the eastern block.....	.....	$164929 83

J. H. PATTISON.

SCHE

DETAILS of Work required for completion

No.	DESCRIPTION.		Total quantities included in Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.
1	Earth excavation in basement, drains, ducts, foundations, &c				
2	Rock to do do	cub. yds.	9977 22	0 21	2099 52
3	Rock down slope of bank, and from thence to water's edge for sewer	do			
4	Allow for temporary drainage	do			
5	Earth filling in trenches				80 00
6	Removing rubbish during progress, and at completion		860 19	0 20	172 14
7	Dry rubbish under stone paving, including pounding		521 0	0 40	208 04
8	Coffer dam for, and putting in cast iron outfall to sewer		108 8	1 00	108 66
9	24 inch glazed-ware pipe, connection from ventiduct to extracting shaft				
10	18 inch do sewer, down slope of bank	linl. feet.			
11	12 inch do for drains	do			
12	9 inch do do	do	500 0	0 42	210 66
13	9 inch bends and junctions, in addition	each.			
14	9 inch glazed-ware pipes, for foul air flues in roofs	linl. feet.			
15	9 inch bonds for do do	each.			
16	6 inch straight pipe for drainage	linl. feet.			
17	Bends, junction, and traps in addition		500 0	0 23	115 00
18	Brick barrel drain from pipe sewer to outfall, at rivers edge, 24 inch diameter, 2 rims		No. 28	0 25	7 00
19	Brickwork for ventiduct in attics	℔ M.			
20	do in external walls and chimnies	do			
21	do in internal walls	do	854629 0	7 00	5982 40
22	do in groined arches	do	1036180 0	6 30	7157 93
23	do laid in putty, for setting boilers	do	31420 0	6 65	208 94
24	English fire bricks to vaults and record rooms	do			
25	Toronto pressed bricks	do	86600 0	38 00	3290 80
26	Brockville white brick lining to safes	do	46095 0	20 00	921 90
27	Brick, tar, and gravel course to outside wells				
28	Brick connexion between boilers and chimnies	supl. yds.	1171 0	0 25	292 75
29	do for circular smoke shaft, within extracting shaft, a space of 6 ft. 6-inches, built circular	℔ M.			
30	Rubble masonry in foundations	do			
31	do above ground level	cub. yds.	3528 2	1 58	5574 35
32	Random coursed work	do	2416 9	1 75	4229 31
33	Rubble masonry to complete ground to first floor	do	5193 15	2 53	13138 77
34	do do first floor to eaves line	do			
35	do do in towers, to 10 ft. above do	do			
36	do do do 20 ft. do	do			
37	do do do 30 ft. do	do			
38	do do do 40 ft. do	do			
39	do do do 50 ft. do	do			
40	do do do 60 ft. do	do			
41	do do do 70 ft. do	do			
42	do do in air ducts	do			
43	Concrete bed under cement floors, (course)	do	308 6	2 45	755 14
44	do do (fine)	do	51 0	2 60	132 60
45	do over air-chambers	do			
	Carried over				44635 91

SCHEDULE E.

equired for completion of the Departmental Buildings, Eastern Block.

al quantities included in Contract.			Contract Works Completed.			ESTIMATE FOR COMPLETION.						Total.
						Contract and additional Work.			Works of Heating and Ventilation.			
ities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
7 22	0 21	2099 52	9997 22	0 21	2099 52	966 9	0 25	241 58	2118 0	0 25	529 50	
									319 21	1 25	399 63	
		80 00				1240 0	1 25	1550 00				
0 19	0 20	172 14	860 19	0 20	172 14				1620 0	0 25	405 00	
1 0	0 40	208 94				644 0	0 25	161 00				
8 8	1 00	108 66				844 22	0 35	297 68				
						131 21	1 00	131 82				
0 0	0 42	210 66							88 0	6 00	528 00	
			2 6	0 42	1 05	124 0	3 25	404 00				
						675 0	0 52	351 00				
						No. 27	1 04	28 08				
0 0	0 23	115 00							2137 0	0 52	1111 24	
28	0 25	7 00							No. 134	1 04	139 34	
						330 0	0 42	138 60				
						No. 18	0 84	15 12				
						74640 0	12 50	933 00	142000 0	12 50	1775 00	
0	7 00	5982 40	742833 0	7 00	5200 18							
0	6 30	7157 93	1044166 0	6 30	6578 25	482000 0	12 50	6025 00				
0	6 65	208 94										
0	38 00	3290 80							34160 0	30 00	1024 80	
0	20 00	921 90				27250 0	26 00	708 50				
0	0 25	292 75	653 0	0 25	163 25							
									8100 0	12 50	101 25	
2	1 58	5574 35							56250 0	25 00	1406 25	
9	1 75	4229 31			5469 17							
15	2 53	13138 77			4026 23	266.0	2 75	731 50				
			2300 19	1 75	10928 73							
						214 0	3 25	695.50				
						662 0	3 72	2482 50				
						117 0	4 22	493 74				
						180 0	4 74	853 20				
						211 0	5 33	124 63				
						297 0	6 00	1782 00				
						166 0	6 75	1120 50				
						135 0	7 59	1024 65				
						45 0	8 54	384 30				
6	2 45	755 14							392 0	2 50	980 00	
0	2 60	132 0				340 0	1 50	510 00				
									25 0	1 50	37 50	
		44655 91			34638 52			21187 90			8417 51	

SCH

DETAILS of Work required for completio

No.	DESCRIPTION.		Total quantities included in Contract. Quantities.	Rate.	Amount.
			$ cts.	$ cts.	$ cts
	Brought forward				44685 91
46	Concrete bed to fire-proof floors	cube feet	1174 4	2 60	3052 6
47	Picked limestone in air ducts, plain face	sup. feet			
48	do in boiler house	do			
49	Limestone flagging to do with bouchard face	do			
50	Stone paving to rooms in basement	do	5896 2	0 25	1474 0
51	Nepean flagging to bottom of ducts	do			
52	3-inch blue stone do between air chambers, pierced to admit the cold air	do			
53	Malone flagging over flues in corridors	do			
54	do to fire-proof safes	do			
55	Potsdam hearths and inner hearths	do	337 7	0 35	116 3
56	6-inch flag-covering over boilers	do	940 4	0 35	329 1
57	Chamfered work on do	do			
58	3-inch Malone do to gallery in main tower, worked and rubbed, 2 faces	do			
59	Moulded edge to landing of main tower		391 0	1 20	469 2
60	3-inch finely jointed and rubbed blue Ohio stone floors to entrance halls, laid to pattern, and mixed with Potsdam	feet lin.	62 0	0 50	31 0
61	Ohio stone dressings	feet super.			
62	Labor on do, (Note.—In contract, the labour in all cases includes the stones, but in finished measurement is entered separately.)	cube feet.			
63	Do do plain face	feet super.	27794 5	0 42	11673 8
64	Do do sunk do	do	6514 11	0 48	3127 1
65	Do do chamfer do	do	10129 0	0 50	5064 5
66	Do do moulded do	do	7968 6	0 55	4382 6
67	Do do circular sunk	do	4629 11	0 52	2406 3
68	Do do do chamfer	do	4292 5	0 54	2317 9
69	Do do do moulded	do	4361 3	0 62	2703 9
70	Rubbed face to do	do			
71	Carving to do				
72	Blue Ohio stone in entrance steps and staircases inside the building	cubic feet.			1881 0
73	Labour on do, as before described, plain face	feet super.	1855 0	0 42	779 1
74	Do do do sunk do	do	183 1	0 48	87 9
75	Do do do chamfer do	do	1299 5	0 50	549 7
76	Do do do moulded do	do			
77	Do do do circular sunk do	do			
78	Do do do do chamfer do	do			
79	Rubbed face on do do moulded do	do			
80	Carving to do	do			
81	Brockville stone				
82	Labour on do, plain face	cube feet.			
83	Do do sunk do	feet super.			
84	Do do chamfer do	do			
85	Do do circular sunk	do			
86	Do do do chamfer	do			
	Brought forward				85233 55

SCHEDULE E.

required for completion of the Departmental Buildings, Eastern Block.—*Continued.*

tal quantities included in Contract.			Contract Works Completed.			ESTIMATE FOR COMPLETION.						Total.
						Contract and Additional Work.			Works of Heating and Ventilation.			
ties.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
cts.	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
		44685 91			34638 52			21187 90			8417 51	
4	2 60	3052 6[illegible]				1952 00	4 00	7808 0				
									2476 6	0 34	842 01	
									227 0	0 80	181 60	
									751 6	0 27	202 91	
2	0 25	1474 0[illegible]				6236 6	0 30	1870 95				
									1429 0	0 15	214 35	
									344 0	0 40	1377 60	
7	0 35	116.[illegible]				290 0	0 50	145 0				
4	0 35	329 1[illegible]				366 0	0 50	183 0				
						1139 0	0 45	512 55				
									303 4	0 50	151 66	
									26 3	0 40	10 50	
0	1 20	469 1[illegible]				391 0	1 50	586 50				
0	0 50	31 6[illegible]				62 0	0 60	37 20				
						90 0						
						37 6						
						1990 0	0 80	1592 00				
						37 6	0 84	19519 50	7778 0	0 84	6533 52	
5	0 42	11673 5[illegible]	15956 0	0 42	6701 60	11550 1	0 25	2887 52	670 7	0 25	167 65	
11	0 48	3127 1[illegible]	3760 6	0 48	1805 04	2578 0	0 40	1031 20	1172 3	0 40	468 90	
0	0 50	5064 9[illegible]	3325 7	0 50	1662 79	7423 1	0 31	2301 15	1084 0	0 31	336 04	
6	0 55	4382 6[illegible]	4159 9	0 55	2287 86	5581 0	0 50	2790 50	899 0	0 50	449 50	
11	0 52	2406 [illegible]	2341 3	0 52	1217 45	1180 1	0 50	5590 04	128 8	0 50	64 33	
5	0 54	2317 9[illegible]	2241 1		1210 19	2538 3	0 50	1269 12	16 0	0 50	8 00	
3	0 62	2703 9[illegible]	2143 8		1329 07	1338 2	0 75	1003 62				
		1881 6[illegible]				1823 5	0 08	145 88	12 1	0 08	0 97	
					630 46			1520 00			160 00	
						2740 0	0 84	2301 60	52 0	0 84	43 68	
0	0 42	779 1[illegible]				4553 6	0 30	1366 05	60 6	0 30	18 15	
1	0 48	87 9[illegible]				748 6	0 48	359 28				
5	0 50	549 7[illegible]				1137 0	0 37	420 69				
						961 3	0 60	576 75				
						3 6	0 60	2 10				
						3 0	0 60	1 80				
						32 6	0 90	29 25				
						4098 8	0 10	409 66				
								45 00				
			751 4	0 42	315 56				156 9	0 66	103 45	
			197 0	0 48	94 56				145 0	0 33	47 85	
			104 2	0 50	52 08				7 7	0 53	4 02	
			46 4	0 52	24 01				57 4	0 40	22 93	
			1 8	0 54	0 90				20 0	0 80	16 00	
									15 0	0 80	12 00	
		85233 55			51939 99			72494 01			19855 13	

SCHE

DETAILS of Work for the completion

No.	DESCRIPTION.		Total quantities included in Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.
	Brought forward				85233 55
87	Cradled face on Ohio stone, plain	feet super.			
88	Do do chamfer	do			
89	Potsdam outer arches over window heads in building—in contract, mixed sandstone	do			
90	Nepean stone facing	do	1691 2	0 55	930 14
91	Painting do in black putty	do			
92	Plain stone chimney pieces in basement	each.			
93	Arnpricr marble do second class	do	No. 15	12 00	180 00
94	Do do first do	do	do 55	26 00	1430 00
95	Nepean stone steps to areas and boiler house	cube feet.	do 25	38 00	950 00
96	Bouchard face to do	feet super.			
97	Rough bouchard steps in lime stone, including stone	do			
98	Fine do do	do	652 7	0 35	228 23
99	Vermont slating to roofs (in finished measurement a layer of felt is included)	℔ square.	1168 9	0 38	444 12
100	Cutting to hips and vallies	feet lin.	364 29	6 65	2422 53
101	Lath plaister, float and set	yds. super.			
102	Render, float and set	do	6502 7	0 21	1365 54
103	Plaster moulded cornices, plain	feet super.	16355 1	0 18	2943 92
104	Do do with one enrichment	do	11656 4	0 14	1631 87
105	Lime whiting basement walls	yds. super.	5326 8	0 18	958 68
106	Portland cement floors in entrance halls and basement	do	691 6	0 03	20 74
107	18-inch Keene's or Martin's cement skirtings	feet lin.	1493 3	0 50	746 62
108	12 do do do do	do			
109	6 do do do do	do	7029 10	0 16	1124 78
110	Cemented arris's to chimney jambs	do	2232 0	0 10	223 20
111	Do facings to staircase arches, plain	feet super.	3037 6	0 03	91 13
112	Do do do moulded	do	492 0	0 20	98 40
113	Plain do to floors of Record Rooms and to walls and floors of water-closets	yds. super.	212 0	0 30	63 60
114	Centreing to arches, lathed	feet super.			
115	Do do ribbed	feet lin.	2783 0	0 07	194 81
116	Centreing for groining of main tower	ft. super.	2560 0	0 07	179 20
117	do do for ventiduct	do	1004 0	0 07	70 28
118	Bracketting for cornices	do			
119	Pine flooring joists, B. M	per M.	6983 0	0 10	698 30
120	Bond timbers and wall plates	do	40.043	16 00	736 68
121	Framed timbers in rafters, purlins, &c	do	16.916	16 00	270 65
122	Herring bone strutting	per 100 ft. lineal.	176.771	19 00	3268 64
123	Pugging to floors, 3 inches thick, including boarding	per square.	2104 0	7 00	147 28
124	3 inch elm floor for gallery in boiler house	do	187 56	1 75	328 23
125	1½ inch boarding to slopes (in contract)	do			
126	1½ inch grooved and tongued boarding to decks, and *in execution* to slopes	do	360 2	1 65	594 04
127	2 inch second quality grooved and tongued flooring	do	123 25	2 45	301 96
129	2½ inch first quality do do	do	242 65	4 55	1104 06
130	1½ inch second quality do do	do	442 75	5 90	2612 22
131	Rafters to boiler house, wrought and framed	ft. lineal.			
132	Casings and jamb linings to basement doors	do	588 0	0 35	205 80
128	Carried forward				111800 13

SCHEDULE E.

k for the completion of the Departmental Buildings, Eastern Block.—(*Continued.*)

quantities included in Contract.			Contract Works Executed.			ESTIMATE FOR COMPLETION.						Total.
						Contract and additional Work.			Works of Heating and Ventilation.			
	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
		85233 55			51969 99			72494 01			19855 13	
					225 16							
					687 00							
	0 55	830 14	1478 4	0 55	813 08							
						30 0	0 55	16 50				
						6987 6	0 27	1886 63				
						5654 0	0 20	1130 80	205 0	0 20	41 00	
	12 00	180 00				No 16	15 00	240 00				
	26 00	1430 00				do 41	40 00	1640 00				
	38 00	950 00				do 41	50 00	2050 00				
						201 0	0 66	132 66	84 0	0 66	55 44	
						674 0	0 33	222 42	118 0	0 33	38 94	
	0 35	228 23										
	0 38	444 12										
	6 65	2422 53	12 65	0 66	84 12	410 0	11 75	4817 50				
						1560 0	20 00	312 00				
	0 21	1365 54										
	0 18	2943 92				22969 0	0 20	4593 80				
	0 14	1631 87				12558 0	0 20	2511 60				
	0 18	958 68				7978 0	0 25	1994 50				
	0 03	20 74				755 0	0 03	22 65	316 0	0 03	9 48	
	0 50	746 62				1890 0	0 75	1417 50				
						8513 0	0 35	2979 35				
	0 16	1124 76				809 6	0 25	202 38				
	0 10	223 20				3768 9	0 15	565 32				
	0 03	91 13				3327 0	0 05	166 36				
	0 20	98 40				2790 4	0 50	1395 12				
	0 30	63 60				1797 9	0 60	1078 65				
						449 0	1 00	449 00				
	0 07	194 81	2438 4	0 07	170 67	200 0	0 15	30 00				
	0 07	179 20	2315 6	0 02	277 86							
	0 07	70 28				0104 0	1 25	1225 00				
									3924 0	0 15	588 60	
	0 10	698 30										
	16 00	736 68										
	16 00	270 65	7589 0	16 00	121 43							
	19 00	3268 64	151.323 0	19 00	2875 13	35.318	23 00	812 31	4098	23 00	94 25	
	7 00	147 28										
	1 75	328 23										
									3½	10 00	35 00	
	1 65	594 04			461 22							
	2 45	301 96			258 22	98 0	4 50	441 00	20 50	4 50	92 25	
	4 55	1104 06				15 25	5 50	83 87				
	5 90	2612 22				448 75	6 50	2916 87				
						101 0	4 00	404 00				
									204 0	0 10	20 40	
	0 35	205 80				836 0	0 35	292 60				
		111800 13			57943 88			108524 60			20830 49	

SCHE

DETAILS of Work required for completion

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.
	Brought forward				111800 13
133	Window seats in basement	ft super.	182 0	0 07	12 74
134	Battening walls in do	ft. square.			
135	do roofs under slates	do			
136	Ridge and hip rolls, including irons	per ft. lin'l.	2060 0	0 05	103 00
137	Rolls on decks for galvanized iron covering	do			
138	3 inch framed ledged outside doors in basement, including frames and ironmongery	ft. super.	118 9	0 40	47 50
139	3 inch do to principal entrances, including 6 × 6 inch frames, wrought iron ornamental hinges and fastenings complete	do	292 6	1 00	292 50
140	2 inch four panelled doors to inner walls of basement and to water closets, including ironmongery	do	1088 0	0 30	326 40
141	2¼ inch inside six panelled doors, including ironmongery	do	3597 4	0 35	1259 04
142	2 inch framed jamb linings to do	do	2863 0	0 20	572 60
143	Architrave mouldings to doors and windows	ft. lineal.	9112 5	0 16	1457 96
144	2 inch casement sashes and frames in basement, including ironmongery	ft. super.	519 1	0 25	129 77
145	Borrowed lights for dark closets	do	125 0	0 25	31 25
146	Framed linings backs and elbows for windows	do	5520 6	0 18	993 69
147	2 inch grooved, tongued and beaded partitions to water closets	do	919 0	0 08	73 52
148	2¼ inch moulded sashes, hung to proper cased boxings, with all necessary lines, weights, and ironmongery, complete	do	8612 5	0 35	3014 35
149	2 inch winter sashes to do hung to similar boxings, with ironmongery and finishings as last described	do	7121 4	0 35	2492 47
150	Sashes and frames to lantern lights, including cills	do			
151	Moulded eaves' cornices to do	ft. lineal.			
152	Water closet seats and risers in pine	each.	No. 7.	4 00	28 00
153	do do in hardwood	do	No. 20.	9 00	180 00
154	Assisting plumber to fit up do and casing supply and service pipes	do'	No. 27.	4 00	108 00
155	Casing pipes in roofs	allowed.			65 00
156	Small feed cisterns for W. C's	each.	No. 4.	3 00	12 00
157	Closets under urinals and lavatories	do	No. 16.	4 00	64 00
158	Step ladders to roofs and towers, including hand-rails	per step.	No. 115.	0 40	46 00
159	Fence-rail, with standards in attics	ft. lineal.	837 6	0 20	167 50
160	Fitting up one room for telegraph office	allowed.			85 00
161	Oak hand-rail for the several stone stair-cases	ft. lineal.	234 10	0 80	187 88
162	10 × 10 inch Newell's for do	each.	No. 3.	8 00	24 00
163	do for "Governor General's entrance," with extra finish		No. 1.		12 00
164	Milled lead laid to cisterns, hips, vallies, flats, and ridges	per cwt.	603.0.23	7 00	4222 44
165	Wiped solder joints to do	ft. lineal.	450 0	0 50	225 00
166	Galvanized sheet iron covering to flats of roofs, on proper rolls	per square			
	Carried over				

SCHEDULE E.

quired for completion of the Departmental Buildings, Eastern Block.—(*Continued.*)

Quantities included in Contract.			Contract Works Executed.			ESTIMATE FOR COMPLETION.						Total.
						Contract and Additional Work.			Works of Heating and Ventilation.			
	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
.....	.....	111800 13	.....	.....	57943 88	.....	.....	108524 60	.....	.....	20830 49	.....
	0 07	12 74	.....	.....	.....	276 0	0 09	24 84	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	66 0	2 25	148 50	.....	.....	.....	.....
	0 05	103 00	.....	.....	.....	400 0	1 00	400 00	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	2159 0	0 07	151 13	.....	.....	.....	.....
	0 40	47 50	.....	.....	.....	16400 0	0 03	492 00	.....	.....	.....	.....
			.....	.....	.....	118 9	0 50	59 37	133 9	0 50	66 87	.....
	1 00	292 50										
			.....	.....	.....	353 0	1 25	441 25	.....	.....	.....	.....
	0 30	326 40										
			.....	.....	.....	1349 0	0 35	472 15	.....	.....	.....	.....
	0 35	1259 04										
	0 20	572 60	.....	.....	.....	3766 0	0 45	1694 70	.....	.....	.....	.....
	0 16	1457 96	.....	.....	.....	4224 0	0 28	1172 72	.....	.....	.....	.....
			.....	.....	.....	9411 0	0 20	1882 20	.....	.....	.....	.....
	0 25	129 77										
	0 25	31 25	.....	.....	.....	880 0	0 40	352 00	.....	.....	.....	.....
	0 18	993 69	.....	.....	.....	60 0	0 30	18 00	.....	.....	.....	.....
			.....	.....	.....	6340 0	0 22	1394 80	.....	.....	.....	.....
	0 08	73 52										
			.....	.....	.....	1050 0	9 12½	113 25	.....	.....	.....	.....
	0 35	3014 35										
			.....	.....	.....	8762 0	0 50	4381 00	.....	.....	.....	.....
	0 35	2492 47										
.....	.....	.....	.....	.....	.....	7345 6	0 40	2938 20	.....	.....	.....	.....
	4 00	28 00	.....	.....	.....	144 0	1 00	144 00	182 0	0 50	91 00	.....
	9 00	180 00	.....	.....	.....	42 0	0 50	21 00	55 0	0 50	27 50	.....
			.....	.....	.....	No. 7.	5 00	35 00	.....	.....	.....	.....
	4 00	108 00	.....	.....	.....	No. 21.	12 05	462 50	.....	.....	.....	.....
		65 00	.....	.....	.....	No. 28.	4 00	112 00	.....	.....	.....	.....
	3 00	12 00	.....	.....	.....	.....	.....	75 00	.....	.....	.....	.....
	4 00	64 00	.....	.....	.....	No. 4.	4 00	16 00	.....	.....	.....	.....
	0 40	46 00	.....	.....	.....	No. 16.	5 00	80 00	.....	.....	.....	.....
	0 20	167 50	.....	.....	.....	No. 115.	0 50	57 50	.....	.....	.....	.....
		85 00	.....	.....	.....	906 0	0 25	226 50	.....	.....	.....	.....
	0 80	187 50	.....	.....	.....	.....	.....	100 00	.....	.....	.....	.....
	8 00	24 00	.....	.....	.....	285 0	1 00	285 00	.....	.....	.....	.....
			.....	.....	.....	No. 4.	10 00	40 00	.....	.....	.....	.....
		12 00										
			.....	.....	.....	No. 1.	.....	14 00	.....	.....	.....	.....
	7 00	4222 44										
	0 50	225 00	.....	.....	15 31	679 0 0	14 00	9506 00	14 1 0	14 00	199 50	.....
			.....	.....	.....	450 00	0 60	270 00	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	150 14	18 00	2702 50	18 00	18 00	324 00	.....
.....	.....	.....	.....	.....	57959 29	.....	.....	138637 71	.....	.....	21539 36	.....

SCHE

DETAILS of Work required for the completion

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.
	Brought forward.....				128.032.82
167	Lead supply and service pipes throughout the building				
168	Water closet apparatus, including basins and taps, sunk handles, 3 ft. of 4½ inch soil pipe, cranks, wires, pullies, and all necessary fittings complete	per cwt.	88.3.4	7 00	621 50
169	Screw washers to 1½ inch lead pipes from urinals and lavatories	each.	No. 27.	35 00	945 00
170	Plated taps, plugs, washers and chains for wash basins..	do	No. 16.	2 25	36 00
171	¾ inch stop-cocks to urinals	do	No. 16.	6 00	96 00
172	1½ ball cocks and copper balls for water-tanks	do	No. 8.	1 50	12 00
173	1 inch do and do for feed cisterns	do	No. 2.	6 00	12 00
174	3 inch brass hydrants	do	No. 4.	3 00	12 00
175	2 inch brass cocks for do	do	No. 3.	6 50	19 50
176	Rolled iron joists for attics and other floors	do	No. 3.	4 00	12 00
177	Cast iron saddles for boiler house trusses	per ton.			
178	Shoes for trusses over agricultural wing	per lb.			
179	6 inch cast iron soil pipe	do			
180	3 inch waste pipe from tanks	per cwt.	19 2 0	3 10	60 45
181	Cast iron shelving for record rooms and safes	do	20 2 0	3 50	71 75
182	do eaves' gutters fixed complete	do	66 3 24	3 10	234 37
183	do downpipes do	do	359 0 0	3 50	1256 50
184	do enamelled urinals	do	103 0 20		361 06
185	do do washing troughs and basins	do	No. 8.	12 00	96 00
186	Wrought iron doors and frames to record rooms and fire proof safes	do	No. 8.	8 00	64 00
187	Wrought iron shutters to record rooms	each and per lb.	No. 10.	200 00	2000 00
188	Ornamental wrought iron cresting	do	1460 0	0 20	292 00
189	Large handsome do to main tower deck, made to drawing	per ft. and per lb.	1335 ft.	3 10	4138 50
190	1 cast iron spiral staircase	per lb.			
191	Sundry wrought iron terminals to roofs	per cwt.	92 00	3 10	285 20
192	Do do to N. W. and E. towers	per lb.			
193	Do do to main tower	do			
194	Do do to entrance steps	do			
195	Wrought iron railing and baluster to basement steps...	do			750 00
196	Do do do to areas	do	2214 0	0 12	265 68
197	Cast iron area gratings	do	7154 0	0 12	858 48
198	Ornamental wrought iron rail and balusters to gallery in main tower	per cwt.			
199	Do do brackets for do	feet lin.	63 0	10 00	630 00
200	Valvular registers in basements	each.	No. 16	15 00	240 00
201	Do to upper rooms	do			
220	Register stove grates	do	No 106	8 10	858 60
203	Stove pipe rings with flanges	do	" 101	26 00	2626 00
204	Bell traps for areas	do			
205	Sheet iron covering to folding doors of boiler house	do			
206	Bells to rooms	℔ ft. sup'r.			
207	Do to entrance doors	each.			
		do			
	Carried over				144887 41

SCHEDULE E.

d for the completion of Departmental Buildings, Eastern Block.—*Continued.*

Quantities included in Contract.			Contract Work Executed.			ESTIMATE FOR COMPLETION. Contract and Additional Work.			Works of Heating and Ventilation.			Total.
	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
		128.032.82			57959 29			138637 71			21539 36	
	7 00	621 50				99 2 5	14 00	1394 00				
	35 00	945 00				No. 28.	40 00	1120 00				
	2 25	36 00				No. 22.	2 50	55 00				
	6 00	96 00				No. 14.	6 00	84 00				
	1 50	12 00				No. 7.	2 00	14 00				
	6 00	12 00				No. 2.	6 00	12 00				
	3 00	12 00				No. 4.	4 00	16 00				
	6 50	19 50				No. 3.	8 00	24 00				
	4 00	12 00				No. 3.	4 00	13 50				
						145 11 1 5	115 00	16739 94				
									1308 lbs.	0 04	52 32	
						1 cwt.	4 50	4 50				
	3 10	60 43				20 3 18		94 10				
	3 50	71 75				20 2 10		92 65				
	3 10	234 37				142 0 0		639 00				
	3 50	1256 50										
		361 06										
	12 00	96 00				No. 7.	14 40	100 80				
	8 00	64 00				No. 7.	9 60	67 20				
	200 00	2000 00				5700 0	0 20	1150 00				
	0 20	292 00				1600 0	0 20	320 90				
	3 10	4138 50				11392 lbs.	0 25	2848 00	42 6	3 00	127 50	
						1440 0	0 25	360 00				
	3 10	285 20				92 0	4 50	414 00				
						6600 0	0 25	1650 00				
						800 0	0 25	200 00				
		750 00				1200 0	0 25	300 00				
						1500 0	0 25	375 00				
	0 12	265 68				1710 0	0 12½	213 75				
	0 12	858 48				8800 0	0 12½	1100 00				
						24.2.0	4 50	110 25				
	10 00	630 00				63 0	12 00	756 00				
	15 00	240 00				16 0	18 00	288 00				
						No. 46	2 50	115 00				
	8 10	858 60				" 96	8 10	777 60				
	26 00	2626 00				" 98	26 00	2728 00				
						" 19	0 50	9 50				
						" 7	2 00	14 00				
									55 0	0 50	27 50	
						do 98	5 00	490 00				
						do 5	10 00	50 00				
		144887 41			57959 29			173377 50			21746 68	

SCHE

DETAILS of Work required for the completion

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.
	Brought forward				144887 41
208	Iron tubing for gas service	feet lin.			
209	British sheet glass for windows	feet super	3982 8	0 35	1393 93
210	German do do	do	3474 0	0 14	486 36
211	Obscure do do	do	194 2	0 50	97 03
212	Coloured do do	do	986 9	0 70	690 73
213	Rolled sheet do do	do			
214	Wrought iron work to gallery in boiler house, and to roofs of same	℔ lb.			
115	Wrought iron ornamental balustrades for principal staircases	℔ ft. lin.	234 10	1 75	411 06
216	Hoop iron band to outside walls	℔ lb.	8700 0	0 05	435 00
217	Wrought iron in roof, straps, bolts, chimney bars, &c.	do	7856 0	0 12	942 72
218	Do in cramps for cut stonework	℔ cwt.	12.0.	9 00	108 00
219	Wrought iron cramps for limestone facing and brick lining of outside walls	per cwt.	140.0.0	7.00	980 00
220	Felt, tar, and gravel covering to decks	per square.	123 0	5 25	645 75
221	Four coats painting in plain colours	per yard.	5170 0	0 09	465 30
222	Graining and varnishing, add to the above	do	1076 0	0 28	301 28
223	Painting, cresting, and terminals picked in colours, add to plain work	do	924 0	0 25	231 00
224	Staining and varnishing, two coats	do	4650 0	0 09	418 50
225	Rolled iron joists	per ton.	139.17.0.25	115 00	16984 04
226	2-inch filleting for fire-proof floors	per square.	442 75	0 60	253 65
227	Ceiling joists for do	do	422 75	0 60	253 65
228	Flooring fillets	do	422 78	0 60	253 65
229	Fencing grounds and building office for Clerk of Works				250 00
230	Allow for rubble masonry, cut stone work, and air gratings for mouth of air ducts				
	Totals				170,489 11

SCHEDULE F.

ed for the completion of the Departmental Buildings, Eastern Block.—*Concluded.*

Quantities included in Contract.			Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
						Contract & Additional Work			Contract of Heating and Ventilation.			
	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
		144887 41			57959 29			173377 50			21746 58	
	0 35	1393 93				5000 0	0 15	750 00				
	0 14	486 38				4000 0	0 50	2000 00				
	0 50	97 08				3600 0	0 20	720 00	288 0	0 20	57 60	
	0 70	690 73				322 0	0 60	193 20				
						1233 0	1 50	1849 50				
									108 0	0 60	64 80	
									8904 0	0 15	1335 60	
	1 75	411 06	5596 0	0 12	671 52	285 0	8 00	2280 00				
	0 05	435 03				3592 0		449.00				
	0 12	942 72				336 0	0 09	30 24	112 0	0 09	10 08	
	9 00	108 00										
	7.00	980 00				6265 0	0 25	1566 25	13 0	0 25	3 25	
	5 25	645 75				1669 0	0 35	584 15				
	0 09	465 30				966 0	0 50	483 00				
	0 28	301 28										
						5806 0	6 20	1161 30				
	0 25	231 00	95.10.0 21		10983 48							
	0 09	418 50										
	115 00	16984 04										
	0 60	253 65										
	0 60	253 65										
	0 60	253 65										
		250 00									1200 0	
		170,489 11			69,614 29			185,444 04			24,418 01	209,862 05

ADOLPHE LÉVÊQUE.
J. H. PATTISON.

SCHE

DEPARTMENTAL Buildings, Ottawa, Western Block—Summary

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.
1	Earth excavation in building, drain and foundations...	cube yds.	4808 11-27	0 21	1009 77
2	do do cold air ducts	do	.....	.....	.....
3	Rock do do do	do	.....	.....	.....
4	Earth do do do	do	.....	.....	.....
5	Rock do do do	do	.....	.....	.....
6	Earth do do from areas	do	1749 9-27	0 52	909 67
7	Rock do do do	do	.....	.....	.....
8	Earth filling and draining over pipes.....	do	.....	.....	.....
9	do under cold air inside building	do	.....	.....	.....
10	do outside building over ducts	do	.....	.....	.....
11	do in trenches.....	do	.....	.....	.....
12	Removing rubbish during progress and at completion of works	do	632 20-27	0 20	126 53
13	Earth excavation to drains.....	do	300	0 20	60 00
14	Substratum of hard, dry rubbish under basement floor..	do	.....	.....	.....
15	Allow for temporary drainage	do	60	1 00	60 00
16	12 inch glazed stoneware drain-pipes.....	ft. lineal.	500	0 42	210 00
17	9 inch do do	do	.....	.....	.....
18	6 inch do do	do	.....	.....	.....
19	do do do	do	500	0 23	115 00
20	do do junctions and bends..	do	.....	.....	.....
21	6 inch cast iron bree traps	each.	.....	.....	.....
22	Rubble masonry, cold air ducts.....	do	.....	.....	.....
23	Picked face on do	cube yds	.....	.....	.....
24	8 inch limestone flagging to do for covering.....	ft. super.	.....	.....	.....
25	Nepean stone do to bottoms of do	do	.....	.....	.....
26	Rubble masonry under steps to boiler house and foundation of boilers	do	.....	.....	.....
	do do do	cube yds.	.....	.....	.....
28	do first floor to eaves' line	do	.....	.....	.....
29	do in towers, 10 feet above do	do	1892 11-27	2 53	4487 79
30	do do 20 do	do	.....	.....	.....
31	do do 30 do	do	.....	.....	.....
32	do do 40 do	do	.....	.....	.....
33	do do 50 do	do	.....	.....	.....
34	Nepean stone facing do	do	.....	.....	.....
35	Potsdam hearths and back hearths.....	ft. super.	.....	.....	.....
36	15 inch glazed stoneware drain-pipe	do	993 9	0 35	347 81
37	Bends and junctions	do	.....	.....	.....
38	Rubble masonry in foundation	each.	.....	.....	.....
39	do above in internal walls	cube yds.	3102 12-27	1 58	4901 86
40	do do do	do	321 3-27	1 75	570 69
41	do random coursed external walls	do	554 24-27	1 75	971 06
42	do groined to first floor.....	do	661 20-27	2 53	1674 20
43	do do to internal walls.....	do	1525 18-27	2 53	3859 94
44	do do in safes	do	108 12-27	1 75	189 73
45	Chisseled face on sand stone dressings, stone included	do	30 4-27	1 75	52 76
46	Sunk face on do do	ft. super.	16.904 10	0 42	7100 03
		do	3990 10	0 48	1915 69
	Carried over		.....	.....	28872 51

SCHEDULE F.

ern Block—Summary of Contract Works and Works Required to finish.

al Quantities included in Contract.			Contract Work Executed.			ESTIMATE FOR COMPLETION. Contract and Additional Work.			Works of Heating and Ventilation			Total.
	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
7	0 21	1009 77	4808 11-27	0 21	1009 77							
									1283 0	0 25	320 75	
									900 0	1 00	900 00	
									29 0	0 25	7 25	
	0 52	909 67	1749 9-27	0 52	909 67							
						1667 0	0 25	416 75				
						1067 0	1 00	1067 00				
						1667 0	0 20	333 40				
									1765 18-27	0 25	414 43	
7	0 20	126 55	632 20-27	0 20	126 55							
	0 20	60 00				839 0	0 25	209 75				
						200 0	0 25	50 00				
	1 00	60 00				173 0	1 00	173 00				
		50 00										
	0 42	210 00				200 0	0 52	104 00				
									2706 0	0 50	1353 00	
	0 23	115 00	48 0	0 23	11 04	124 0	0 42	52 08				
						1800 0	0 42	756 00				
						No. 30.	1 25	37 50				
						No. 15.	1 00	15 00				
									218 0	2 50	545 00	
									2925 0	0 34	994 50	
									2250 0	0 35	787 50	
									1875 0	0 15	281 25	
									114 0	2 50	285 00	
									69 3-27	2 75	181 81	
	2 53	4487 79	1892 11-27	2 53	4787 79	563 14-27	3 75	2075 70				
						46	4 22	194 12				
						111 9-27	4 74	527 54				
						22 1-27	5 33	117 46				
						125 5-27	6 00	751 00				
						120 10-27	6 75	812 50				
	0 35	347 81				3940 0	0 27	1063 80				
						1067 6	0 45	480 38				
									54 0	1 00	54 00	
									No. 421.	2 00	842 00	
	1 58	4901 86	3102 17-27	1 58	4101 86							
	1 75	570 69	174 23-27	1 75	306 00							
	1 75	971 06	554 24-27	1 75	971 06							
	2 53	1674 20	661 20-27	2 53	1674 20							
	2 53	3859 94	1508 1-27	2 53	3815 34							
	1 75	189 78	86 1-27	1 75	150 57							
	1 75	52 76	30 4-27	1 75	52 76							
	0 42	7100 03	10637 9	0 42	4467 84							
	0 48	1915 60	2552 0	0 48	1225 12							
		29872 51			24409 57			9236 93			6993 49	

SCHE

DEPARTMENTAL Buildings, Ottawa, Western Block—Summary

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate. $ cts.	Amount. $ cts.
	Brought forward				28872 51
47	Chamfered face on sandstone dressings, stone included				
48	Moulded do do	ft. super.	6378 2	0 50	3189 08
49	Circular sunk do do	do	5679 1	0 55	3123 50
50	do chamfered do do	do	1781 4	0 52	926 29
51	do moulded do do	do	2120 10	0 54	1145 25
52	do face do do	do	1599 11	0 62	991 95
53	Potsdam relieving arches	do	275 3	0 52	143 14
54	Carving to cut Ohio stone	do	1096 11	0 55	603 30
55	Hammer dressed face to angle quoins, stone included	do			1179 25
56	Chamfered face on ditto	do	907 4	0 42	381 08
57	Ohio stone in dressings	do	29 10	0 25	7 46
58	Plain face on do	ft. cube.			
59	Sunk face do	ft. super.			
60	Chamfered face do	do			
61	Moulded do	do			
62	Circular sunk do	do			
63	do chamfered do	do			
64	do moulded do	do			
65	Rubbing do	do			
66	Dressing down cut stone (generally)	do			
67	Pointing in black ash mortar	do			
68	do do	do			
69	Lime whiting in basement	do			
70	do do	yds. sup.	302 0	0 03	9 24
71	Blue Ohio stone steps in principal staircases	do			
72	Plain face on do	feet cube.	502 0	0 45	225 90
73	Sunk do on do	feet super.	2361 0	0 42	991 62
74	Chamfer do do	do	165 0	0 48	79 20
75	Blue Ohio stone steps to entrance doorways and to areas and area copings	do			
76	Plain face on do	feet cube.			
77	Blue Ohio stone steps of boiler house and steps to basement	feet super.			
78	Plain face on do	feet cube.			
79	3-inch blue Ohio stone flagging to air chambers, basement floor and areas	feet super			
80	3-inch Nepean do to cold air ducts inside building	do	3263 0	0 25	815 75
81	4-inch blue Ohio stone to boiler house floor	do			
82	3-inch Nepean flagging to connect flues to warm air vaults	do			
83	3-inch mixed paving (half Ohio and Malone stone), laid in squares, to halls	do			
84	Malone paving to safes	do	1324 0	0 25	331 00
85	3-inch lime stone templates under joists	do	507 9	0 25	126 94
86	Black lime stone piers to carry roof of boiler house	do	2262 4	0 04	90 49
87	Picked face on do	feet cube.			
88	Rough bouchard face to face of areas, steps and copings (stone included)	feet super.			
		do	2961 6	0 35	1036 53
	Carried over				44199 38

DULE F.

of Contract Works and Works required to finish.—*Continued.*

Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
			Contract and Additional Work.			Works of Heating and Ventilation.			
Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
		24409 57			9236 98			6993 49	
3365 2	0 50	1682 58							
3333 5	0 55	1833 38							
837 8	0 52	435 52							
1730 1	0 54	934 25							
1353 9	0 62	839 32							
275 3	0 52	143 13							
1050 3	0 55	577 64							
		814 10			445 00			104 00	
			11446 6	0 84	9615 06	8336 6	0 84	7002 66	
			7138 2	0 30	2141 45	480 5	0 25	120 10	
			1056 7	0 48	507 20	1177 10	0 40	471 13	
			4292 5	0 37	1588 19	751 4	0 31	232 91	
			3872 8	0 60	2323 60	570 0	0 50	378 50	
			313 1	0 60	187 85	123 8	0 50	61 83	
			857 0	0 60	352 20	12 8	0 50	6 49	
			251 2	0 90	226 90				
			1104 9	0 10	110 48				
					824 00				
			4184 0	0 15	672 60	58 0	0 15	8 70	
						116 0	0 15	17 40	
			154 0	0 04	6 16				
						1200 0	0 04	48 00	
			502 0	0 84	421 68				
			1541 0	0 30	462 30				
			182 0	0 48	87 36				
			751 0	0 37	277 87				
			1283 2	0 84	1077 86				
			3569 0	0 30	1070 70				
			150 0	0 84	126 00	204 0	0 84	171 36	
			670 6	0 30	201 15	562 0	0 25	140 50	
			7845 0	0 20	1569 00	3332 0	0 20	666 40	
						3124 0	0 27	468 60	
						1104 0	0 27	298 08	
						350 0	0 15	52 50	
			1324 0	0 80	1059 20				
			487 9	0 50	243 87				
						384 0	0 25	96 00	
						768 0	0 30	230 40	
		31669 46			34834 66			17569 05	

SCHE

DEPARTMENTAL Buildings, Ottawa, Western Block—Summary

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.
	Brought forward				44199 33
89	Vermont slating per square		289 0	6 65	1921 85
90	English fire bricks in safes	per M.	65323 0	38 00	2482 27
91	Toronto pressed bricks in do	do	34567 0	20 00	691 34
92	Common bricks in do	do	76582 0	6 30	482 47
93	Ohio stone to door jambs of do	feet cube.			
94	Plain face on do	feet super	371 0	0 42	155 82
95	Sunk face on do	do	51 4	0 48	24 64
96	Brickwork in warm air vaults	per M.			
97	Do in circular smoke shafts	do			
98	Do in do arches	do			
99	Do set in oil putty for setting boilers	do			
100	Do in internal walls	do	83906 0	6 50	5064 60
101	Do in external walls and chimnies	do	785172 0	7 00	5496 20
102	Concrete under cement floors	cube yds.	493 16-27	2 45	1209 30
103	Do to fire-proof floors	do	1239 5-27	2 60	3221 88
104	Do over warm air vaults				
105	Brick, tar and gravel course to walls of foundations	yds. super.	1008 0	0 25	252 00
106	Breaking through and building in door frame in walls of boiler house, and making good after				
107	Plain chimney pieces in basement	each.	No. 14	12 00	168 00
108	2nd class marble do to ground floor and first floor	do	No. 63	24 00	1512 00
109	1st class do do do do	do	No. 13	36 00	468 00
110	Covering or roof to portico, east entrance				80 00
111	Lath plaster float and set to ceilings	yds. super.	6184 3 9	0 21	1298 71
112	Render float and set to walls	do	15957 3-9	0 18	2872 26
113	Plain plaster cornice	feet super.	8868 0	0 14	1241 52
114	Do do with one enrichment	do	3012 0	0 18	542 69
115	Keen's Cement to walls and floors of W. C.	do			
116	Do to skirting, 18 inches deep	do			
117	Do to do 12 do	do	6419 8	0 16	1027 14
118	Do to do 6 do	do	2858 0	0 10	285 80
119	Do to chamfer and moulded to arches of staircases	do			
120	Do to plain face on do	do			
121	Do to arrises on do	feet lin.			
123	Do to circular chamfer	do			
124	Cement floor (fine concrete)	yds cube.	1418 0	3 00	4443 0
125	Battening walls	per square.			
126	Pugging 3 inches thick	do	181 0	1 75	316 75
127	Herring bone strutting	feet lin.	2103 0	7 00	147 21
128	Deal fillits to concrete floors to boiler house roof	per square.			
129	Do to ceiling do				
130	Do to receive galvanized iron	B. M.			
131	Do to fireproof floors	per square.	434 18 100	0 60	260 50
132	Do to ceiling of do	do	434 18-100	0 60	260 50
133	2-inch 1st quality flooring battens laid	do	426 0	5 90	260 00
134	2-inch 2d do do	do	65 75-100	4 55	299 16
135	1¼-inch roofing boards, tongued and grooved, for flats	do	134 52-100	2 45	329 57
136	1¼-inch do plain, do	do	276 33-100	1 65	455 94
137					
	Carried over				81470 57

SCHEDULE F.

...rn Block—Summary of Contract Works, and Works reqtired to finish.—(*Continued.*)

Quantities included in Contract.		Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
					Contract and Additional Work.			Works of Heating and Venlation.			
	Rate.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
.....	44199 38	.....	.....	31669 46	.....	.....	34834 66	.....	.....	17569 05	.....
	6 65	.....	.....	.....	293 0	11 75	3448 62	.....	.....	.....	.....
	38 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	20 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	6 30	8638 0	6 30	54 42	.....	.....	.....	.....	.....	.....	.....
	691 34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	482 47	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	0 42	371 0	0 42	155 82	.....	.....	.....	.....	.....	.....	.....
	0 48	47 3	0 48	22 68	.....	.....	.....	.....	.....	.....	.....
	155 82	.....	.....	.....	.....	.....	.....	166600 0	12 50	2032 50	.....
	24 64	.....	.....	.....	.....	.....	.....	8000 0	30 00	240 00	.....
	.....	.....	.....	.....	.....	.....	.....	40380 0	14 00	565 32	.....
	.....	.....	.....	.....	.....	.....	.....	55200 0	30 00	1656 00	.....
	6 50	803906 0	6 30	5064 60	165767 0	12 50	2072 09	154344 0	12 50	1929 30	.....
	5064 60	701480 0	7 00	4910 56	.....	.....	.....	.....	.....	.....	.....
	7 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	5496 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	2 45	.....	.....	.....	1764 21–27	4 00	7019 11	53 0	3 00	159 00	.....
	1209 30	.....	.....	.....	.....	.....	.....	170 16–27	1 50	255 89	.....
	2 60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	3221 86	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	0 25	510 0	0 25	127 50	.....	.....	.....	.....	.....	.....	.....
	252 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....	.....	.....	.....	25 10	.....
	12 00	.....	.....	.....	No. 14	15 00	210 00	.....	.....	.....	.....
	168 00	.....	.....	.....	No. 57	24 00	1368 00	.....	.....	.....	.....
	24 00	.....	.....	.....	No. 21	36 00	756 00	.....	.....	.....	.....
	1512 00	.....	.....	.....	.....	.....	100 00	.....	.....	.....	.....
	36 00	.....	.....	.....	6629 0	0 25	1657 25	178 0	0 21	37 38	.....
	468 00	.....	.....	.....	17538 0	0 17	2981 46	.....	.....	.....	.....
	80 00	.....	.....	.....	12761 10	0 20	2552 37	.....	.....	.....	.....
	0 21	.....	.....	.....	3796 10	0 25	949 21	.....	.....	.....	.....
	1298 71	.....	.....	.....	460 0	1 00	460 00	.....	.....	.....	.....
	0 18	.....	.....	.....	6711 0	0 35	2348 85	.....	.....	.....	.....
	2872 26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	0 14	.....	.....	.....	2248 0	0 18	404 10	.....	.....	.....	.....
	1241 52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	0 18	.....	.....	.....	721 0	0 50	360 50	.....	.....	.....	.....
	542 69	.....	.....	.....	981 0	0 16	156 96	.....	.....	.....	.....
	.....	.....	.....	.....	1342 0	0 05	67 10	.....	.....	.....	.....
	0 16	.....	.....	.....	833 0	0 60	499 80	.....	.....	.....	.....
	1027 14	.....	.....	.....	1599 0	4 00	6396 00	.....	.....	.....	.....
	0 10	.....	.....	.....	51 0¼	2 25	115 31	.....	.....	.....	.....
	285 80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....	.....	16 0	1 00	16 00	.....
	.....	.....	.....	.....	.....	.....	.....	16 0	1 00	16 00	.....
	3 00	.....	.....	.....	.....	.....	.....	1320 0	18 00	23 76	.....
	4443 0	.....	.....	.....	632 0	1 00	632 00	.....	.....	.....	.....
	1 75	.....	.....	.....	632 0	1 00	632 00	.....	.....	.....	.....
	316 75	.....	.....	.....	418 0	6 50	2717 00	.....	.....	.....	.....
	7 00	.....	.....	.....	3 78–100	5 50	20 74	.....	.....	.....	.....
	147 21	131 84–100	2 45	323 20	.....	.....	.....	.....	.....	.....	.....
	.....	138 91–100	1 65	229 20	.....	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	0 60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	260 50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	0 60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	260 50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	5 90	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	260 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	4 55	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	299 16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	2 45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	329 57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1 65	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	485 94	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	.....	.....	.....	42557 46	.....	.....	72759 13	.....	.....	24573 20	.....
	81470 57										

SCHI[illegible]DUL[illegible]

DEPARTMENTAL Buildings, Ottawa, Western Block—Summary [illegible]f Con[illegible]

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate.	Amount.	Cont[illegible] Quantiti[illegible]
				$ cts.	$ cts.	
	Brought forward				81470 57	
138	2-inch grooved and tongued deal partitions for W. C.	feet super.	1176 0	0 08	94 08	
139	3-inch outside deal door and frame (including iron, mongery)	do				
140	2-inch four panel doors to basement and W. C., including ironmongery	feet super.	1051 0	0 30	315 30	
141	3-inch framed entrance doors and frame, including ironmongery	do	332 0	1 00	332 00	
142	2¼-inch six panel doors, including ironmongery	do	2685 4	0 35	939 87	
143	2-inch framed jamble-wings to doors	do	2373 0	0 20	474 65	
144	Do circular	do				
145	2-inch framed jamble-wings, soffits, backs and elbows to windows	do	7307 0	0 18	1315 26	
146	1-inch plain do and casings to beams	do	1268 0	0 35	443 80	
144	7 moulded window and door architraves	feet lin.	8203 10	0 16	1312 61	
148	Do circular do	do				
149	Ovolo casement sashes and frames in basement, including all ironmongery, etc., complete	do	1081 0	0 25	270 25	
150	2¼ inch moulded sashes, hung to proper casings, with patent sashlines and pullies, complete	do	7063 6	0 35	2472 23	
151	Winter sashes and frames do do	do	4200 0	0 35	1470 00	
152	Borrowed light sashes do do					
153	2-inch deal window seats on proper bearer in basement.	do				
154	Water closet fittings in pine, complete	each.	No. 6	3 00	18 00	
155	Do do hardwood	do	No. 16	9 00	144 00	
156	Small feed cisterns to water closets	do	No. 4	3 00	12 00	
157	Pine closets under urinals	do	No. 14	3 00	42 00	
158	Do to washing troughs	do	No. 8	3 00	24 00	
159	7 × 5 oak handrail for principal staircase, including fixing iron balusters	feet lin.	165 10	0 50	82 92	
160	10 × 10 oak newels to do	each.	No. 3	8 00	24 00	
161	Step ladders to roof, with handrail, etc., to upper rooms in roof, complete		No. 47	0 50	23 50	
162	Fruce rail of pine in attics, with standards, complete		786 0	0 10	78 60	
163	Battens under slates	per square.	334 0	0 50	167 00	
164	Assisting plumber fitting up water closets and casings, etc					
165	Do urinals and lavatoraries					
166	Mot deal frame 6 × 6 and 3 inch ledged and braced doors, hung folding, complete with fastenings, etc., to boiler house	feet super.				
167	Centring to warm air vaults	do				
168	Rafters, purlins, &c	ft. B M	118441 0	19 00	2250 37	99927 [illegible]
168	Bond timbers, woodbricks, wall plates, &c	do	19446 0	16 00	311 13	4522 [illegible]
170	Flooring joists	do	41542 0	16 00	664 67	
171	Centring	do	1892 0	0 07	132 44	1892 [illegible]
172	Ribbed do	do	3132 0	0 07	219 24	2127 [illegible]
173	Hips and ridge rolls	feet lin,	2083 0	0 03	62 49	
174	Bracketting for cornices	feet sup.	3308 0	0 10	330 80	
175	Fitting up telegraph office					
	Carried over				95517 78	

SCHEDULE F.

tern Block—Summary of Contract Works, and Works required to finish.—(*Continued.*)

tal Quantities included in Contract.			Contract Work Executed.			ESTIMATE FOR COMPLETION. Contract and Additional Work.			ESTIMATE FOR COMPLETION. Works of Heating and Ventilation.			Total.
es.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
.....	.....	81470 57	.....	.....	42557 46	.....	.....	72759 13	.....	.....	24573 20	.....
0	0 08	94 00	.....	.....	.....	1336 0	0 12½	167 00	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	10 00	.....	.....	.....	.....
0	0 30	315 30	.....	.....	.....	1786 46	0 35	625 10	.....	.....	.....	.....
0	1 00	332 00	.....	.....	.....	290 6	1 25	363 15	.....	.....	.....	.....
4	0 35	939 85	.....	.....	.....	2384 0	0 45	1072 80	.....	.....	.....	.....
0	0 20	474 40	.....	.....	.....	5261 0	0 28	1473 08	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	94 0	0 40	37 60	.....	.....	.....	.....
0	0 18	1315 20	.....	.....	.....	7688 0	0 22	1691 36	.....	.....	.....	.....
0	0 35	443 80	.....	.....	.....	881 0	0 10	88 10	.....	.....	.....	.....
0	0 16	1312 61	.....	.....	.....	8787 0	0 20	1757 40	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	48 0	0 30	14 40	.....	.....	.....	.....
0	0 25	270 25	.....	.....	.....	991 1	0 40	396 40	.....	.....	.....	.....
6	0 35	2472 23	.....	.....	.....	6810 7	0 50	3405 33	.....	.....	.....	.....
0	0 35	1470 00	.....	.....	.....	4842 2	0 45	2178 97	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	136 0	0 30	40 80	.....	.....	.....	.....
	3 00	18 00	.....	.....	.....	592 0	0 09	53 28	.....	.....	.....	.....
	9 00	144 00	.....	.....	.....	No. 6	5 00	30 00	.....	.....	.....	.....
	3 00	12 00	.....	.....	.....	No. 16	12 50	200 00	.....	.....	.....	.....
	3 00	42 00	.....	.....	.....	No. 6	4 00	24 00	.....	.....	.....	.....
	3 00	24 00	.....	.....	.....	No. 14	5 00	70 00	.....	.....	.....	.....
			.....	.....	.....	No. 8	5 00	40 00	.....	.....	.....	.....
	0 50	82 92	.....	.....	.....	192 0	1 00	192 80	.....	.....	.....	.....
	8 00	24 00	.....	.....	.....	No. 3	10 00	30 00	.....	.....	.....	.....
	0 50	23 50	.....	.....	.....	No. 64	0 50	32 00	.....	.....	.....	.....
	0 10	78 00	.....	.....	.....	881 0	0 25	220 25	.....	.....	.....	.....
	0 50	167 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	60 00	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	68 00	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	52 0	0 40	20 80	.....	.....	.....	.....
	19 00	2250 37	99927 00	19 00	1898 61	.....	.....	.....	3000 00	0 20	600 00	.....
	16 00	311 13	4522 00	16 00	35 62	.....	.....	.....	.....	.....	.....	.....
	16 00	664 67	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	0 07	132 44	1892 00	0 07	132 44	50 0	0 15	7 50	.....	.....	.....	.....
	0 07	219 24	2127 00	.....	213 59	198 0	0 12	23 76	.....	.....	.....	.....
	0 03	62 46	.....	.....	.....	2113 0	0 07	147 91	.....	.....	.....	.....
	0 10	330 50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	100 00	.....	.....	.....	.....
.....	.....	95517 78	.....	.....	44837 72	.....	.....	87400 90	.....	.....	25173 20	.....

SCHE

DEPARTMENTAL Buildings, Ottawa, Western Block—Summary

No.	DESCRIPTION.		Total Auantities included in Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.
	Brought forward				
176	Timber in large tanks in towers	ft. B M	3540 0	19 00	106 20
177	Cutting to hips and vallies to slating	feet lin.			95517 78
178	Feet tar and gravel roofs	per square.	128 0	5 25	672 00
179	Rolls for galvanized iron roofs	feet lin.	5440 0	0 03	163 20
180	Rolled iron joists	per ton.	109,14.3 3	115 00	12619 98
181	Wrought iron doors and frames to safes	each.	No. 10	210 00	2100 00
182	Do to warm air vaults and smoke shafts	per lb.			
183	Cast iron shelving in vaults	cwt.	50.1.22 0	3 10	156 35
184	Wrought iron lantern to boiler house	lbs.			
185	Galvanized covering to roof of boiler house	per square.			
186	Wrought iron saddle bars and stanchion to window	lbs.			
187	9-inch cast iron bell traps and gratings to areas	each.			
188	Patent hoop iron bond to walls	lbs.	8197 0	0 05	409 85
189	Cast iron area gratings	cwt.			
190	Wrought iron balusters to principal staircases	feet, lbs.	165 10	1 75	290 21
191	do ornamental terminals to entrance steps	each.			
192	do do cresting to roofs	lbs.	1254 0	3 10	3887 40
193	do do finials to towers	do			550 00
194	do bars in warm air vaults	do			
195	do in straps, bolts, and chimney bars	do	15698 0	0 12	1883 76
196	do cramps		1008 0	0 12	120 96
197	do for lime stone facing	do	14000 0	0 07	980 00
198	Registar grates	each,	No. 76	26 00	1976 00
199	Valvular registar ventilators	do	No. 78	8 00	689 50
200	do basement	do			
201	Cast iron eaves guttering, fixed complete	cwt.	335 3.21 0	3 50	1175 73
202	do rain water pipes, do	do	103.0 0	3 50	366 50
203	Wrought iron railings to areas and area steps and basement stairs	lbs.	8114 0	0 10	811 40
204	Cast iron enamelled washing troughs in water closets	each.	No. 8	8 00	64 00
205	Do do urinals	do	No. 8	12 00	96 00
206	Do in girder to phographing room	per cwt.	39 1 4	3 10	123 28
207	Do in do in octagon tower				
208	Milled lead in cisterns, tanks, ridges and vallies	do	417 3 2	7 00	2924 37
209	Wiped soldar joints to cisterns	feet lin.	236 0	0 50	1 8 00
210	Water apparatus complete	each.	No. 22	35 00	770 00
211	1½-inch lead wash-pipe				
212	-inch do supply do	per cwt.	48 1 2	7 00	337 85
213	-inch do do				
214	-inch cast iron soil pipe	do	22 2 5	3 10	69 88
215	-inch do waste do from tanks	do	17 0 16	3 50	60 00
216	½-inch screw washer (brass)	each.	No. 16	2 25	36 00
217	Plated taps to lavatoraries	do	No. 16	6 00	96 00
218	½-inch stop-cocks to urinals	do	No. 8	1 50	12 00
219	1½-inch ball-cocks to balls	do	No. 2	6 00	12 00
220	1-inch do do	do	No. 4	3 00	12 00
221	3-inch hydrants	do	No. 3	5 00	15 00
222	2-inch brass cocks to do	do	No. 3	3 00	9 00
223	Painting from oils	yds. super.	4010 0	0 09	360 00
	Carried over				1,8994 49

SCHEDULE F.

ern Block—Summary of Contract Works, and Works required to finish.—*Continued.*

al Quantities included in Contract.			Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
						Contract and Additional Work.			Wor s of Heating and Ventilation.			
s.	Rate.	Amount.	Quantites.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.	
					44837 72			87400 90			25175 20	
0	19 00	106 20										
		95517 73				3540 0	30 00	106 20				
0	5 25	672 00				1664 6	0 20	332 90				
0	0 03	163 20										
3	115 00	12619 96	75.9.0 15	118 00	8677 55	91.0.1 17	115 00	10467 29	7.0.2 25	115 00	809 13	
	210 00	2100 00				5750 0	0 20	1150 00				
0	3 10	156 35				50.1 22	4 50	227 00	3510 0	0 20	702 00	
						1882 0	0 20	376 40				
0	0 05	409 35				2240 0	0 25	560 00	20¾ 0	18 00	573 50	
						No. 15	1 00	15 00				
0	1 75	290 21				31.0 8	4 50	139 82				
						192 0	8 00	1542 67				
0	3 10	3887 40				No. 2	25 00	50 00				
		550 00				10296 0	0 25	2574 00				
						1200 0		300 00				
0	0 12	1883 76	6723 0	0 12	806 76				566 0	0 12½	69 50	
0	0 12	120 96	1008 00	0 12	120 96							
0	0 07	980 00										
	26 00	1976 00				No. 92	26 00	2392 00				
	8 00	689 50				No. 103	8 10	834 30				
						No. 50	2 25	112 50				
	3 50	1175 73										
	3 50	366 50										
	0 10	811 40				7820 0	0 12½	977 50				
	8 00	64 00				No. 8	9 60	76 80				
	12 00	96 00				No. 8	14 40	115 20				
	3 10	123 23										
	7 00	2924 37				567 0 27	14 00	7941 38	630 0	0 12½	78 75	
	0 50	1.8 00				282 0	0 60	169 20				
	35 00	770 00				No. 22	40 00	880 00				
						4937 0	0 12½	616 88				
	7 00	337 88				120 0	0 12½	15 00				
						1050 0	0 12½	131 25				
	3 10	69 88				69 0 14	4 50	311 07				
	3 50	60 00				21 3 20	4 50	98 67				
	2 25	36 00				No. 16	3 00	48 00				
	6 00	96 00				No. 16	6 00	96 00				
	1 50	12 00				No. 6	2 00	12 00				
	6 00	12 00				No. 6	5 00	30 00				
	3 00	12 00				No. 2	4 00	8 00				
	5 00	15 00				No. 3	8 00	24 00				
	3 00	9 00				No. 3	4 50	13 50				
	0 09	360 90				4252 0	0 25	1137 50	55 0	0 25	13 75	
		1.8994 49			54442 99			122179 19			27221 83	

SCH

DEPARTMENTAL Buildings, Ottawa, Western Block—Summar

No.	DESCRIPTION.		Total Quantities included in Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.
	Brought forward				128994 41
224	Painting 3 coats, including knotting and stopping	yds. super.	985 0	0 07	68 95
225	Graining and varnishing in addition	do	985 0	0 28	275 80
226	Staining in asphaltum	do	5990 0	0 09	539 10
227	Varnishing hand-rails, newels included	do	43 0	0 15	6 45
228	Painting, cresting and picking in colours	do	590 0	0 15	88 50
229	Glazing with British sheet glass	feet super.	3018 0	0 35	1056 30
230	Do do do	do	4116 0	0 14	576 24
231	Do coloured do	do	671 0	0 70	469 70
232	Do obscure do	do	239 0	0 50	119 50
233	Painting ballusters bronze	do			
234	Gas piping 2 , 1½ , ¾ , all at	feet lin.			
235	do fittings to rooms	each.			
236	Bells to front and entrance doors	do			
237	Do to rooms	do			
238	Fencing in buildings and building clerk of works office				
239	Performing all jobbing, &c				200 00
	Totals				132,395 03

SCHEDULE F.

DEPARTMENTAL BUILDINGS, OTTAWA, WESTERN BLOCK.

Summary of Contract Works and Works Required to finish.

Total amount of Contract at Schedule Rates	$132,395 03	
Contract work executed	54,442 99	
ESTIMATE FOR COMPLETION.		
Main Building	130,983 50	
Works of Heating and Ventilation	27,309 33	
		$158,292 83
Works prepared on Ground Materials on Ground, do at brickyard,		17,523 87
Total amount required for Completion of Western Block		140,768 96

SCHEDULE F.

Contract Works, and Works required to finish.—(*Continued.*)

Contract Work Executed.			ESTIMATE FOR COMPLETION.						Total.
			Contract and Additional Work.			Works of Heating and Ventilation.			
Quantities.	Rate.	Amount	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	cts.	$ cts.
.....	.....	54442 09	.....	.....	122179 19	.....	.....	27221 83	.....
.....	.....	.....	1033 0	0 30	309 90	.....	.....	.....	.....
.....	.....	.....	1033 0	0 05	51 65	.....	.....	.....	.....
.....	.....	.....	6104 0	0 20	1220 80	.....	.....	.....	.....
.....	.....	.....	43 0	0 15	6 45	.....	.....	.....	.....
.....	.....	.....	760 0	0 30	228 00	.....	.....	.....	.....
.....	.....	.....	2901 8	0 50	1450 83	250 0	0 35	87 50	.....
.....	.....	.....	3045 8	0 20	609 13	.....	.....	.....	.....
.....	.....	.....	1186 6	1 50	1779 75	.....	.....	.....	.....
.....	.....	.....	269 0	0 60	161 40	.....	.....	.....	.....
.....	.....	.....	134 0	0 75	100 50	.....	.....	.....	.....
.....	.....	.....	5306 0	0 15	795 90	.....	.....	.....	.....
.....	.....	.....	No. 183	5 00	915 00	.....	.....	.....	.....
.....	.....	.....	No. 4	10 00	40 00	.....	.....	.....	.....
.....	.....	.....	No. 107	5 00	535 00	.....	.....	.....	.....
.....	.....	.....	.....	.....	600 00	.....	.....	.....	.....
.....	.....	54,442 99	.....	.....	130,983 50	.....	.....	27,309 33	.....

JOHN HARPER, Measurer.
GEO. B. PELHAM, Clerk of Works.

SCHEDULE G.—PARLIAMENT BUILDINGS, OTTAWA.

Summary of Measurement of Work prepared.

	Valuation at Schedule and Progress Estimate Rates.	Commissioners' Valuation.
	$ cts.	
Contract work at Schedule rates.....	12,795 57	
Omissions from contract at Schedule rates.....	9 81	
	12,785 76	
Additional work at Progress Estimate rates.....	6,273 88	
Works for heating and ventilation.....	1,451 46	
Total carried to general summary.....	$20,511 10	$27,630 26

THOMAS GUNDEY,
JOHN BOWES.

SCHE

MEASUREMENT of Work prepared on

No.	DESCRIPTION.		Contract Work. Quantities.	Rate.	Amount.	Omissions from Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.		$ cts.	$ cts.
1	Nepean and Brockville stone for quoins	cub. ft.	2821 0	0 50	1410 50			
2	Picked face work to do	sup. ft.	3991 0	0 17	678 47			
3	Nepean facing averaging 10 in. bed	do						
4	Potsdam stone for relieving arches.	do						
5	Large sized bond stones for tower							
6	Picked face limestone for ducts and main sewer stone	cub. ft.						
7	Picked face to do	sup. ft.						
8	do Circular	do						
9	Brockville stone	cub. ft.						
10	Plain face to do	sup. ft.						
11	Sunk face to do	do						
12	Chamfered to do	do						
13	Moulded stops	No.						
14	Brockville stone in steps	cub. ft.						
15	Picked face to do	sup. ft.						
16	Ohio stone	cub. ft.	1255 0	0 45	564 75			
17	Plain face to do	sup. ft.	475 5	0 22	104 59	33 8	0 22	7 41
18	Do circular	do	24 8	0 30	7 40			
19	Sunk face do	do	481 4	0 35	168 47			
20	Do circular	do	27 6	0 50	13 75			
21	Moulded work do	do	155 0	0 31	48 05			
22	Do circular do	do	124 0	0 48	59 52			
23	Chamfered do	do	0 4	0 24	0 08			
24	Carved do	do	21 7	0 76	16 40			
25	Moulded stops	No.	24 0	0 20	4 80	12 0	0 20	2 40
26	Arnprior Marble, (Exclusive of 17 columns prepared for houses but condem'd.)	cub. ft.	141 6	1 05	148 58			
27	Circular face polished to do	sup. ft.	1087 0	0 74	804 38			
28	Portage du Fort Marble (The additional work consists of columns prepared for Member's Lobbies, stated to have been ordered by Hon. Mr. Cauchon.)	cub. ft.	1535 4	1 40	2149 47			
29	Plain face polished	sup. ft.	629 7	0 53	333 67			
	Carried forward				6512 90			9 81

SCHEDULE G.

Work prepared on Ground for Parliament Buildings, Ottawa.

Omissions from Contract.			Additional Work.			Heating and Ventilation.			TOTAL.		
Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.
	$ cts.	$ cts.		$ cts.	$ cts.			$ cts.		$ cts.	$ cts.
									2821 0	0 38	1071 98
									3991 0	0 20	798 20
			12401 0	0 27	3348 27				12401 0	0 27	3348 27
			533 0	0 55	293 15				533 0	0 55	293 15
			514 3	0 21	107 99				514 3	0 27	138 85
						2133 5			2133 5	0 17	362 68
						2367 3	0 86	852 21	2367 3	0 17	402 43
						454 7	1 25	568 22	454 7	0 42	190 93
			117 0	0 55	64 35				117 0	0 66	77 22
			94 9	0 30	28 43				94 9	0 33	31 27
			40 2	0 70	28 11				40 2	0 53	21 29
			29 0	0 55	15 95				29 0	0 40	11 60
			20 0	0 50	10 00				20 0	0 50	10 00
						8 7	1 60	13 73	8 7	0 66	5 66
						22 8			22 8	0 33	7 48
33 8	0 22	7 41	147 3	0 75	110 44	9 7	0 75	7 19	1411 10	0 84	1185 94
						12 5	0 28	3 48	454 2	0 25	113 54
									24 8	0 35	8 63
			254 1	0 42	106 72	8 0	0 42	3 36	743 5	0 40	297 37
			281 8	0 56	157 73	2 3	0 56	1 26	311 5	0 50	155 71
			33 7	0 40	13 43				188 7	0 50	94 29
			18 0	0 62	11 16	3 3	0 62	2 01	145 3	0 75	108 94
			28 2	0 32	9 01				28 6	0 31	8 84
			21 7	1 08	23 31				43 2	1 50	64 75
12 0	0 20	2 40							12 0	50	6 00
									141 6	1 80	254 70
									1087 0	2 50	2717 50
			87 0	1 80	156 60				1622 4	1 80	2920 20
		9 91							629 7	1 50	944 38
					4484 65			1451 46			15651 80

SCHE

MEASUREMENT of the work prepared on Ground

No.	DESCRIPTION.		Contract Work. Quantities.	Rate.	Amount.	Omissions from Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.		$ cts.	$ cts.
	Brought forward				6512 90			9 81
30	Plain circular do	sup. ft.	17 2	0 74	12 70			
31	Sunk face do	do	116 1	0 74	85 90			
32	Moulded do	do	209 2	1 06	221 72			
33	Do circular do	do	26 8	1 59	42 40			
34	Chamfered do	do	76 10	0 74	56 86			
35	Panelled and moulded stops polish'd.	No.	4 0	0 53	2 12			
36	Moulded stops polished	do	19 0	0 53	10 07			
37	Plain face rubbed	sup. ft.	148 7	0 32	47 54			
38	Do circular do	do	13 8	6 53	7 24			
39	Sunk face do	do	22 4	0 53	11 83			
40	Moulded work do	do	29 1	0 85	24 72			
41	Do circular	do	17 2	1 38	23 67			
42	Circular sunk face rubbed	do	2 10	0 75	2 13			
43	Chamfered face do	do	14 7	0 54	7 88			
44	Plain face	do	3 3	0 26	0 85			
45	Sunk do	do	196 4	0 47	92 28			
46	Moulded do	do	0 5	0 76	0 32			
47	Chamfered	do	0 10	0 47	0 39			
48	Moulded stops	No.	13 0	0 35	4 55			
49	Centering	sup. yds.	1 1-9	1 05	1 17			
50	White pine framed for roof	M. B. M.	63627 0	18 30	1164 37			
51	Wall plate, 9 x 3 lineal	lineal ft.	883 0	0 03	26 49			
52	1 in deafening boards, cut to l'gths.	sup. ft.	2220 0	12 00	26 64			
53	Basement and window frame, 3.0 x 6.6	No.	62 0	6 25	387 50			
54	3 inch oak sills to do 3.0 x 1.8	No.						
55	Basement and window frame with oak sills, 3.0 x 6.6	No.						
56	Do do 3.0 x 7.6	No.						
57	2 inch moulded sash not glued	sup. ft.	1652 5	0 13	214 81			
58	Contractor foreman states 50 of above frames prepared and put together, and subsequently taken apart and altered by direction of the Architects							
59	Sets frames, 8.5 of 4½ x 4, wrought and moulded	No.						
60	Do circular, 4, 4½ x 4 do	do						
61	3 in. oak sills, 3 x 1.8, wrought and weathered	do						
62	1 " oak fillets, 3.0 x 0.3 do	do						
63	1½ " Pulley stiles, 6.0 x 10½	pairs.						
64	Iron pullies	do						
65	3.0 x 0.7½, 1½ wrought pine for heads	No.						
66	½ inch wrought linings	sup. ft.						
67	½ " do reduced from 1	do						
68	½ " wrought linings	do						
69	1 " do "	do						
70	½ " parting beads	lin. ft.						
71	1 " do	do						
72	1½ " moulding	do						
73	1 " beaded architraves, 3½ wide	sup. ft.	75 10	0 09	6 83			
74	Circular rebated and headed head, 8 inches girth	lin. ft.						
	Carried forward				8995 88			9 81

DULE G.

or Parliament Buildings, Ottawa.—*Continued.*

Additional Work.			Heating and Ventilating.			TOTAL.		
Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.
		4484 65			1451 46			15651 86
214 7	1 87	401 27				231 0	2 50	579 38
						116 1	2 50	290 21
						209 2	3 15	658 87
50 10	4 12	209 43				77 6	4 12	319 50
						76 10	2 50	192 08
						4 0	1 50	6 00
						19 0	1 50	28 50
						148 7	0 80	118 87
						13 8	1 80	24 60
						22 4	1 80	40 20
						29 1	2 45	71 25
						17 2	3 42	58 71
						2 10	2 60	7 37
						14 7	1 80	26 25
						3 3	0 60	1 95
						196 4	1 00	196 33
						0 5	2 10	0 88
						0 10	1 60	1 33
						13 0	0 75	9 75
						1 1-9 0	1 35	1 50
						63627 0	20 00	1272 54
						883 0	0 03	26 49
						2220 0	16 00	35 52
						62 0	5 00	310 00
62 0	1 12½	69 75				62 0	1 12½	69 75
18 0	6 25	112 50				18 0	6 12½	110 25
6 0	6 87½	41 25				6 0	6 87½	41 25
						1652 5	0 19	313 96
50 0	1 50	75 00				50 0	1 50	75 00
26 0	0 55	14 30				26 0	0 55	14 30
19 0	0 78	14 82				19 0	00 78	14 82
15 0	1 12½	16 88				15 0	1 12½	16 88
26 0	0 25	6 50				26 0	0 25	6 50
22½ 0	0 80	18 00				22½ 0	0 80	18 00
1 0	0 12½	0 13				1 0	0 12½	0 13
18 0	0 40	7 20				18 0	0 40	7 20
50 0	0 08	4 00				50 0	0 08	4 00
161 3	0 11	17 74				161 3	0 11	17 74
41 3	0 08	3 30				41 3	0 08	3 30
156 0	0 08	12 48				156 0	0 08	12 48
416 0	0 01	4 16				416 0	0 01	4 16
208 9	0 01½	3 12				208 0	0 01½	3 12
140 0	0 02	2 80				140 0	0 02	2 80
						75 10	0 09	6 83
40 0	0 19	7 60				40 00	0 19	7 60
		5526 88			1451 46			20679 75

SCHE

MEASUREMENT of Work prepared on

No.	DESCRIPTION.		Contract Work. Quantities.	Rate.	Amount.	Omissions from Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.		$ cts.	$ cts.
	Brought forward				8995 88			9 81
75	5 x 3 rough for do	linl. ft.						
76	1½ moulding	do						
77	1½ moulding, circular	do						
78	Circular head to 2 inch sash	do	10 6	0 04	0 42			
79	Centre mullion	do	9 2	0 03	0 27			
80	Meeting rail of 2 inch sashes	do	11 0	0 03	0 30			
81	Stiles	do	22 6	0 03	0 68			
82	Bottom rail	do	7 0	0 03	0 21			
83	Window bars	do	6 3	0 02	0 12			
84	3 x 1 moulded transom	do	48 0	0 03	1 44			
85	Bottom rails, 3. 6 long, squared	No.	6 0	0 07	0 42			
86	Stiles, 2. 5 2 x 1¾ do	do	17 0	0 05	0 85			
87	Circular heads, 1. 6 do	do	2 0	0 05	0 10			
88	Stiles, 0. 8 long, 2 x 1¾ do	do	2 0	0 01½	0 3			
89	do 1. 4 do do do	do	21 0	0 02	0 42			
90	do 2. 8 do do do	do	25 0	0 04	2 20			
91	do 3. 6 do do do	do	13 0	0 05	0 65			
92	do 4. 3 do do do	do	8 0	0 06	0 48			
93	do 4. 3 do do rough	do	6 0	0 05	0 30			
94	Bottom rail, 2. 6 4 x 2, squar'd	do	3 0	0 07½	0 23			
95	do 2. 6 2 x 2, do	do	8 0	0 06	0 48			
96	Circular heads to frame, 2 x 0, 5 x 3, squared	do	4 0	0 10	0 40			
97	1 inch beaded architrave 7 wide.	supl. ft.						
98	1 " moulded stops 4. 3 long, 6 wide	No.						
99	1 " springers to do, 2. 4 long, 6 wide	do						
100	Hardwood keys, 11 x 4 x 1⅛	do						
101	2 double-headed and chamfered architraves, 11 girth	supl. ft.						
102	2 circular, circular do	do						
103	Basement court window frames, circular-headed, 4 x 3, wrought and ribbed with moulded water bar, 2. 10 x 5. 8	No.	18 0	2 56	46 08			
104	2½ oak sills to do, 2. 10 x 0 5	do						
105	2 circular-headed sash to do	supl. ft.	224 5	0 13	29 18			
106	Windows to basement of wing towers, circular-headed, wrought, chamfered and rebated frames, 4 x 3½, with 4. 1 x 2 0. with 3 inch oak sills, 11 wide, weathered and chamfered, and ½ oak and 1¾ x 1¼ pine moulded water bars	No.						
107	2 circular-headed sash to do, 2 lights each; 3. 5 x 1 5½	supl. ft.						
108	1½ tongued bead for architraves	linl. ft.						
109	1½ do circular	do						
110	6 x 4 wrought, ribbed, and beaded door frames, for internal doors, 4.0 x 7.2	No.	38 0	1 50	57 00			
	Carried over				9138 14			9 81

SCHEDULE G.

f Work prepared on for Parliament Buildings, Ottawa.—*Continued.*

missions from Contract.			Additional Work.			Heating and Ventilating.			TOTAL.		
antities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.
		9 81			5526 88			1451 46			20679 75
			6 0	0 07	0 42				6 0	0 07	0 42
			137 0	0 02	2 74				137 0	0 02	2 74
			80 0	0 04	3 20				80 0	0 04	3 20
									10 6	0 05	0 53
									9 2	0 04	0 36
									10 0	0 04	0 40
									22 6	0 04	0 90
									7 0	0 04	0 28
									6 3	0 03	0 19
									48 0	0 04	1 92
									6 0	0 10½	0 63
									17 0	0 07½	1 27
									2 0	0 09	0 18
									2 0	0 02	0 04
									21 0	0 02½	0 53
									55 0	0 05	2 75
									13 0	0 07	0 91
									8 0	0 09	0 72
									6 0	0 06	0 36
									3 0	0 10	0 30
									8 0	0 08	0 64
									4 0	0 12	0 48
			182 0	0 09	16 38				182 0	0 09	16 38
			122 0	0 26	31 72				122 0	0 26	31 72
			18 0	0 15	2 70				18 0	0 15	2 70
			64 0	5 10	6 40				64 0	0 10	6 40
			376 0	0 20	75 20				376 0	0 20	75 20
			110 0	0 60	66 00				110 0	0 60	66 00
									18 0	3 20	57 60
			18 0	0 40	7 20				18 0	0 40	7 20
									224 5	0 19	42 64
			24 0	2 50	60 00				24 0	2 50	60 00
			119 7	0 20	23 92				119 7	0 20	23 92
			128 0	0 02	2 56				128 0	0 02	2 56
			76 0	0 04	3 04				76 0	0 4	3 04
									38 0	2 00	76 00
		9 81			5828 36			1451 46			21170 86

SCHE

MEASUREMENT of Work prepared on

No.	DESCRIPTION.		Contract Work. Quantities.	Rate.	Amount.	Omissions from Contract. Amount.	Rate.	Amount.
				$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
	Brought forward.....		.....	.....	9138 14	.....	.....	9 81
111	2 in. 4 chamfered doors, double tenon, to lock rail, 3.1½ x 7.7, frames put together, panels prepared.....	No.	48 0	5 00	240 00	.....	.....	.....
112	1½ in. jamb linings, groovel and tongued	supl. ft.	1085 10	0 07	76 01	.....	.....	.....
113	2 in. circular beaded, 6 panel doors, prepared for fixing double tenoned lock rail, 7.9 x 3.9.....	No.	12 0	3 00	36 00	.....	.....	.....
114	2 in. moulded architrave, 6 wide, with 2 tongued bead.....	supl. ft.	196 0	0 11	21 56	.....	.....	.....
115	2 inch do circular do	do	72 0	0 22	15 84	.....	.....	.....
116	2 " double rebated jambs	do	147 0	0 10	14 70	.....	.....	.....
117	2 " do circular.....	do	58 4	0 20	11 67	.....	.....	.....
	PANELS PREPARED FOR ABOVE DOORS.							
118	Long panels.....	No.	42 0	0 25	10 50	.....	.....	.....
119	Short panels.....	do	46 0	0 25	11 50	.....	.....	.....
120	2 in. circular beaded, 4 panel doors, tenoned lock rails, 8.3 x 2.6.....	do	4 0	3 50	14 00	.....	.....	.....
121	Frames to external basement doors, 6 x 4, circular-headed, relieved, and chamfered, 8.9 x 3.10	do	2 0	3 50	7 00	.....	.....	.....
122	2 in. casements with fixed circular heads, prepared for court yard window, but since changed, 6 lights, 5.3 x 2.5.....	do	2 0	1 82	3 64	.....	.....	.....
123	3 x 4 circular-headed frames, 1½ pully stiles, and moulded and panelled spandrels for ground floor windows, 13.3 x 4.7.....	do	62 0	18 30	1134 60	.....	.....	.....
124	3 in oak sills, chamfered, sunk and beaded, 5.0 x 15	.....	.....	.....	.....	.....	.....	.....
125	1½ in wrought and chamfered frieze, with 4.10 quadrefoils, 5.0 x 1.6.....	.....	.....	.....	.....	.....	.....	.....
126	1½ in. stuff prepared for above, 5.0 x 1.5.....	do	.....	.....	.....	.....	.....	.....
127	2 in. moulded, 4 light sash, with double margin style, 5.7 x 4.2½..	do	60 0	3 05	183 00	.....	.....	.....
128	2 in do 4 light, 5.6 x 4.2½.....	do	60 0	3 00	180 00	.....	.....	.....
129	2 " do prepared, not put together	do	3 0	2 80	8 40	.....	.....	.....
130	2 in moulded circular-headed sash, 4 lights, 5.0 x 4.2½.....	do	61 0	2 73	166 53	.....	.....	.....
131	2 in do do with moulded transom, 6½ girth, 5.0 x 4.2½.....	do	61 0	3 00	183 00	.....	.....	.....
132	2 in circular heads prepared	do	4 0	0 80	3 20	.....	.....	.....
133	2 in stuff sawn out for do	do	6 0	0 40	2 40	.....	.....	.....
134	Transom, 4.2 long, 9½ girth.....	do	.....	.....	.....	.....	.....	.....
135	Small circular moulding.....	lin. ft.	12 0	0 05	0 60	.....	.....	.....
136	3 x 4 moulded frame.....	do	10 10	0 09	0 98	.....	.....	.....
137	3 x 4 sawn out for circular do ...	do	40 3	0 08	3 22	.....	.....	.....
138	Moulded transom, 6½ girth	do	32 8	0 12½	4 08	.....	.....	.....
	Carried over.....		.....	.....	10470 57	.....	.....	9 81

DULE G.

Ground for Parliament Buildings, Ottawa.—*Continued.*

Additional Work.			Heating and Ventilating.			TOTAL.		
Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.
		5828 36			1451 46			21170 86
						48 0	5 00	240 00
						1058 10	0 07	76 01
						12 0	3 00	36 00
						196 0	0 18	35 28
						72 0	0 36	25 92
						147 0	0 10	14 70
						58 4	0 20	11 67
						42 0	0 25	10 50
						46 0	0 25	11 50
						4 0	4 00	16 00
						2 0	5 00	10 00
						2 0	2 60	5 20
						62 0	18 30	1134 60
62 0	1 68	104 16				62 0	1 68	104 16
26 0	2 50	65 00				26 0	2 50	65 00
42 0	0 35	14 70				42 0	0 35	14 70
						60 0	4 70	282 00
						60 0	4 60	276 00
						3 0	4 50	13 50
						61 0	4 20	256 20
						61 0	4 80	292 80
						4 0	1 00	4 00
						6 0	0 50	3 00
1 0	0 60	0 60				1 0	0 60	0 60
						12 0	0 05	0 60
						10 10	0 09	0 98
						40 03	0 08	3 22
						32 8	0 12½	4 08
		6012 82			1451 46			24119 08

SCHE

MEASUREMENT of Work prepared on

No.	DESCRIPTION.		Contract Work.			Omissions from Contract.		
			Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.
				$ cts.	cts.		$ cts.	$ cts.
	Brought forward				10470 57			9 81
139	¾ moulding	linl. ft.	34 8	0 02	0 69			
140	3 x 4 wrought, moulded, and circular-headed frames, with 1½ in. pulley, stiles and panelled spandrels to wardrobe and reading room windows, 9.4 x 3.8	No.	26 0	9 30	241 80			
141	3 in. oak sill, weathered, sunk and beaded, 4.0 x 1.7½	do						
142	Moulded transom, 6½ girth	linl. ft.	85 7	0 12½	10 70			
143	2 in 4 light sash, 4.3½ x 3.3½	No.	26 0	1 82	47 32			
144	2 " 4 do 4.4½ x 3.3½	do	26 0	1 88	48 88			
145	2 " 4 circular do, 3.2½ x 3.3½	do	52 0	1 37	71 24			
146	1¼ " wrought faced, with 4.7 quatrefoils cut, 4.0 x 1.1½	do						
147	3 oak sunk sills, morticed, 3.6 x 0.5	do						
148	3 x 4 moulded and circular-headed frames, 1½ in pulley stiles, and panelled spandrels, 10.3 x 2.9	do	49 0	8 50	416 50			
149	3 in oak sills, moulded, sunk, and weathered, 3.0 x 1.5	do						
150	2 in 4 light sash, 4.6 x 2.3	do	71 0	1 30	92 30			
151	2 in 4 do 4.7 x 2.3	do	71 0	1 34	95 14			
152	2 in 2 circular do, 3.8 x 2.3	do	146 0	1 06	154 76			
153	Moulded transom, 6½ girth	linl. ft.	164 3	0 12½	20 53			
154	1½ in freize. with 2.10 in quatrefoils cut, 2.10 x 1.4	No.						
155	1½ in planed for do, 3.0 x 1.5	do						
156	1½ in rough, do 3.0 x 1.5	do						
157	3 x 4 wrought, moulded, and circular-headed frames put together, 8.0 x 2.3	do	6 0	2 50	15 00			
158	1½ in pulley stiles, 10.3 x 0.10½	pairs.	6 0	0 75	4 50			
159	Moulded transom, 6½ girth	linl. ft.	34 8	0 12½	4 33			
160	5 x 3 squared for transom	do	13 6	0 03	0 40			
161	3 x 2½ rebated circular heads, 4.4 long	No.	12 0	0 35	4 20			
162	3 x 2½ squared for do, 4.4 long	do	19 0	0 25	4 75			
163	1 in squandrels, wrought	supl. ft.	123 9	0 08	9 90			
164	1 in wrought boxings	do	23 8	0 08	1 89			
165	1 in facia, 7 wide	do	19 8	0 06	1 18			
166	1½ in moulded facia, 2¼ wide	linl. ft.	42 6	0 02	0 85			
167	2¼ x ½ prepared for moulded facia	do	161 6	0 01	1 52			
168	⅝ Circular moulding	do	25 6	0 04	1 02			
169	½ in Beads	do	217 9	0 01	2 18			
170	2¼ x ⅝ moulded facia	do	50 8	0 02	1 01			
171	2¼ x ⅝ prepared for do	do	82 4	0 01	0 82			
172	⅝ Moulding	do	4 4	0 02	0 09			
173	3 x 4 Circular, sawn and cleaned	do	112 8	0 04	4 51			
174	4 x 1 Beaded transom	do	44 0	0 02	0 88			
175	5 x 1 do	do	263 6	0 02	5 27			
176	1 Stop	do	96 3	0 01	0 96			
177	Double margin sash stiles, 4.6 long, 2½ x 2	No.	8 0	0 13	1 04			
	Carried over				11736 73			9 81

SCHEDULE G.

Work prepared on Ground for Parliament Buildings, Ottawa.—*Continued.*

Quantities.	Rate.	Amount.	Additional Work. Quantities.	Additional Work. Rate.	Additional Work. Amount.	Heating and Ventilating. Quantities.	Heating and Ventilating. Rate.	Heating and Ventilating. Amount.	TOTAL. Quantities.	TOTAL. Rate.	TOTAL. Amount.
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.
		9 81			6012 82			1451 46			24119 08
									34 8	0 02	0 69
									26 0	9 30	241 80
			26 0	1 56	40 56				26 0	1 56	40 56
									85 7	0 12½	10 70
									26 0	2 80	72 80
									26 0	2 90	75 40
									52 0	2 11	109 72
			25 0	2 00	50 00				25 0	2 00	50 00
			4 0	0 40	1 60				4 0	0 40	1 60
									49 0	8 50	416 50
			49 0	1 00	49 00				49 0	1 00	49 00
									71 0	2 00	142 00
									71 0	2 06	146 26
									146 0	1 65	240 90
									164 3	0 12½	20 53
			1 0	1 25	1 25				1 0	1 25	1 25
			36 0	0 20	7 20				36 0	0 20	7 20
			36 0	0 15	5 40				36 0	0 15	5 40
									6 0	3 50	21 00
									6 0	1 00	6 00
									34 8	0 12½	4 33
									13 6	0 04	0 54
									12 0	0 42	5 04
									19 0	0 27	5 13
									123 9	0 10	12 38
									23 8	0 10	2 37
									19 8	0 08	1 57
									42 6	0 02	0 85
									161 6	0 01	1 62
									25 6	0 05	1 27
									217 9	0 01	2 18
									50 8	0 02	1 01
									82 1	0 01	0 82
									4 4	0 02	0 09
									112 8	0 05	5 63
									44 0	0 02	0 88
									263 6	0 02	5 27
									96 3	0 01	0 96
									8 0	0 18	1 44
		9 81			6167 83			1451 46			25831 77

SCH

MEASUREMENT of Work prepared

No.	DESCRIPTION.		Contract Work. Quantities.	Rate.	Amount.	Omissions from Contract. Quantities.	Rate.	Amount.
				$ cts.	$ cts.	$ cts.	$ cts.	$ cts
	Brought forward				11736 73			9 8
178	Double margin sash stiles 4.6 2 x 2	No.	2 0	0 13	0 26			
179	Meeting rails squared, 2.3 long, 2½ x 1½	do	49 0	0 05	2 45			
180	Centre bars tenoned, 2.3 long, 2 x 1	do	26 0	0 07	1 82			
131	Meeting rails moulded, 2.3 long	do	31 0	0 07	2 17			
182	Stuff prepared for do, 2.3 long, 2½ x 2	do	2 0	0 05	0 10			
183	Wrought and moulded frames, 4.9 long, 3 x 4	do	31 0	0 24	7 44			
184	do Circular stuff prepared, 4.4 long, 3 x 4	do	7 0	0 28	1 96			
185	do partly prepared, do	do	9 0	0 25	2 25			
186	do sawn out	do	19 0	0 21	3 99			
187	1¼ Pulley stiles, 10.3 x 10½ cut and planed	pairs.	6 0	0 60	3 60			
188	3 Wrought, weathered and beaded oak sill, 3.0 x 1.6¼ morticed	No.						
189	3 do not morticed	do						
190	3½ x 1 Beaded linings	lin. ft.	22 0	0 02	0 44			
191	2 Circular heads of sashes, 3.8 long.	No.	4 0	0 07	0 28			
192	5 x ½ Facia dressed	lin. ft.	120 0	0 02	2 40			
193	7 x ½ do rough	do	11 3	0 02	0 22			
194	2 x 2 prepared for sash	do	24 2	0 03	0 72			
195	2½ x 2 do planed	do	23 4	0 03	0 70			
196	3½ x 3 do do	do	4 6	0 03	0 13			
197	1½ x 2 do sawn	do	65 0	0 02	1 30			
	MAIN TOWER WINDOWS.							
198	3 x 3¼ Circular head for frame, squared 4.4 long	No.	22 0	0 25	5 50			
199	3 x 3 Transom, squared 2.6 long	do	9 0	0 04	0 36			
200	3½ x 3 Stiles, squared 4.9 long	do	28 0	0 15	4 20			
201	3 x 4 Frames for upper windows of wing Courts, wrought and rubbled	do	40 0	3 20	128 00			
202	3 Oak sills, wrought and weathered, 3.3 x 0.5	do						
203	2 inch 2 Light sashes for fixed heads, 2.0 x 2.11	do	40 0	0 78	31 20			
204	2 " 2 Light Casements with water bar, 3.9 x 2.11	do	40 0	1 45	58 00			
205	Large dormers and sash, as per specification, complete	No.	42 0	12 00	504 00			
	Less. No. 11.—6 cut brackets, 2.9 x 1.5 and 37 bases for finials							
206	Small dormer, as per specification	do	86 0	3 00	258 00			
207	⅝ inch Ovolo mouldings	lin. ft.	2459 0	0 01	24 59			
208	Blocks for King-heads to roof, 1.2 x 2, 4 x 0.8	No.						
209	1 Beaded architrave, 6 ft. wide	supl. ft.	63 9	0 09	5 74			
210	Sash stiles, 4.9 long, 2 x 2.	No.	22 0	0 07	1 54			
211	Wrought Pine scantling	Ft. B. M.						
212	Wrought Iron stanchions and saddle bars	cwt.	0.2.11	9 00	5 38			
	Total				12795 57			9 8

Ottawa, 28th January, 1862,

SCHEDULE G.

T of Work prepared ... Ground for Parliament Buildings, Ottawa.—*Concluded.*

Omissions from Contract.			Additional Work.			Heating and Ventilating.			TOTAL.		
Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount	Quantities.	Rate.	Amount.
$ cts.	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.
		9 8			6167 83			1451 46			25831 77
									2 0	0 18	0 36
									49 0	0 08	3 92
									26 0	0 09	2 34
									31 0	0 09	2 79
									2 0	0 05	0 10
									31 0	0 27	8 37
									7 0	0 32	2 24
									9 0	0 30	2 70
									19 0	0 25	4 75
									6 0	0 75	4 50
			10 0	1 08	10 80				10 0	1 08	10 80
			19 0	0 80	15 20				19 0	0 80	15 20
									22 0	0 02	0 44
									4 0	0 08	0 32
									120 0	0 03	3 60
									11 3	0 03	0 34
									24 2	0 04	0 96
									23 4	0 04	0 93
									4 6	0 04	0 18
									65 0	0 03	1 95
									22 0	0 30	6 60
									9 0	0 05	0 45
			40 0	0 50	20 00				28 0	0 19	5 32
									40 0	2 50	100 00
									40 0	0 50	20 00
									40 0	1 20	48 00
									40 0	2 20	88 00
									42 0	22 00	924 00
			2 0	5 00	10 00				88 0	5 00	410 00
									2459 0	0 01	24 59
			43 0	1 00	43 00				43 0	1 00	43 00
									63 9	0 09	5 74
									22 0	0 10	2 20
			392 0	18 00	293 15				392 0	18 00	7 05
									0.2.11	28 00	16 75
		9 8			6559 98			1451 46			27630 26

THOMAS GUNDRY,
JOHN BOWES.

SCHEDULE H.—Materials delivered for Parliament Buildings, Ottawa.

No.	DESCRIPTION.		Quantities.	Schedule Price. Rate.	Schedule Price. Amount.	Valuation. Rate.	Valuation. Amount.
				$ cts.	$ cts.	$ cts.	$ cts.
1	Pit and drift sand	cube yds.	1337 0	0 52	695 24	0 80	1069 60
2	Common lime	bushels.	415 0	0 11	45 65	0 20	83 00
3	Prepared mortar	do	88 0	0 12½	11 00	0 15	13 20
4	Water lime	barrels.	184 0	1 68	309 12	2 25	414 00
5	Fire clay	do	4 0	2 00	8 00	3 00	12 00
6	Do	bags.	8 0	1 50	12 00	2 00	16 00
7	Gravel and broken stone prepared for concrete	cube yds.	84 0	0 50	42 00	0 62½	52 50
8	Nepean spalls and chips	toises 54 ft.	199 0	0 87	173 13	0 87	173 13
9	Limestone for rubble	do	780¾ 0	0 87	679 26	1 25	975 94
10	Do rock excavated	do	134½ 0	0 87	117 01	.....	.....
11	Bricks, common red, (about one-third of these are place bricks..	M	1422643 0	3 85	5477 17	7 00	9958 [illegible]
12	Fire bricks	do	11382 0	35 00	398 37	35 00	398 37
13	Do for arches	do	2800 0	10 00	112 00	40 00	112 00
14	4 in. stoneware drain pipes..	lin. yard.	169¼ 0	0 42	71 12	0 95	160 [illegible]
15	4 do do damaged	do	21½ 0	0 32	6 83	0 70	14 [illegible]
16	6 do do	do	294⅔ 0	0 73	215 10	1 25	368 [illegible]
17	6 do do damaged	do	85½ 0	0 55	46 93	0 93	79 [illegible]
18	8 do do	do	6 0	1 00	6 00	1 50	9 00
19	8 do do damaged	do	8¾ 0	0 75	6 50	1 12½	9 [illegible]
20	9 do do	do	108 0	1 05	113 40	1 55	167 [illegible]
21	9 do do damaged	do	70⅔ 0	0 78	55 12	1 15	81 [illegible]
22	12 do do	do	128 0	1 26	161 28	2 00	256 00
23	12 do do damaged	do	6 0	0 94	5 64	1 50	9 [illegible]
24	6 in and double 4 in. junction	No.	1 0	0 75	0 75	1 00	1 00
25	do do damaged	do	1 0	0 55	0 55	0 75	0 [illegible]
26	6 in and 6 do do	do	8 0	0 60	4 80	0 90	7 [illegible]
27	9 in and 4 do do	do	3 0	0 70	2 10	1 00	3 00
28	do do damaged	do	1 0	.....	0 52	.....	0 [illegible]
29	9 in and 6 do do	do	9 0	0 75	6 75	1 25	11 [illegible]
30	do do damaged	do	1 0	0 55	0 55	.....	0 [illegible]
31	9 in and 9 do do	do	8 0	0 75	6 00	1 50	12 00
32	do do damaged	do	1 0	0 55	0 55	.....	0 [illegible]
33	12 in and 12 do do	do	3 0	1 00	3 00	2 00	6 00
34	4 in bends	do	8 0	0 82	6 56	1 90	15 [illegible]
35	4 do do damaged	do	1 0	0 61	0 61	.....	1 [illegible]
36	6 do do	do	13 0	1 46	18 98	2 50	32 [illegible]
37	6 do do damaged	do	2 0	1 10	2 20	1 87	3 [illegible]
38	9 do do	do	8 0	2 10	16 80	3 10	24 [illegible]
39	9 do do damaged	do	2 0	1 57	3 14	2 32	4 [illegible]
40	Ornamental tena cotta chimney tops, 2 feet 8 inches high	do	18 0	4 00	72 00	5 00	90 00
41	do octagonal, do	do	42 0	4 00	168 00	5 00	210 [illegible]
42	do 3 feet 6 inches high	do	2 0	4 00	8 00	5 00	10 [illegible]
43	Ohio stone	cube feet.	21686 0	0 45	9758 70	0 70	15180 [illegible]
44	4 inch limestone flagging	sup. feet	6 3	0 09	0 56	0 12½	0 [illegible]
45	6 do do	do	136 0	0 12	16 32	0 15	20 [illegible]
46	8 do do	do	10 6	0 15	1 58	0 18	1 [illegible]
47	9 do do	do	9 0	0 17	1 53	0 20	1 [illegible]
48	3 do Nepean do	do	81 0	0 08	6 48	0 12	9 [illegible]
49	4 do do do	do	95 6	0 10	9 55	0 15	14 [illegible]
50	6 do do do	do	632 10	0 15	94 93	0 20	126 [illegible]
51	7 do do do	do	6 4	0 17	1 08	0 24	1 [illegible]
52	3 do Ohio do	do	41 8	0 12	5 00	0 20	8 [illegible]
53	4 do do do	do	3 6	0 15	0 53	0 25	0 [illegible]
54	6 do do do	do	1 9	0 23	0 40	0 35	0 [illegible]
55	Potsdam stone	cube feet	16 7	0 58	9 12	0 55	9 [illegible]
56	Floats	lin. feet.	1686 0	0 02	21 72	0 03	32 [illegible]
	Carried over		.....	.....	19017 23	.....	30278 [illegible]

SCHEDULE H.—Materials delivered for Parliament Buildings.—*Continued.*

No.	DESCRIPTION.		Quantities.	Schedule Price. Rate.	Schedule Price. Amount.	Valuation. Rate.	Valuation. Amount.
				$ cts.	$ cts.	$ cts.	$ cts.
	Brought forward			.....	19017 23	.....	30278 94
37	Cedars	lin. feet.	33 0	0 02	0 66	0 03	0 99
38	Pine spars in long lengths average 12 inches diameter	do	367 0	0 04	14 68	0 06	22 02
39	Slabs	M. B. M.	428 0	4 00	1 71	5 00	2 14
40	1 inch common pine boards	do	21169 0	8 40	177 82	9 00	190 52
41	1½ do do	do	3120 0	8 40	26 20	9 00	28 08
42	1¼ do do in long lengths	do	322 0	8 40	2 70	9 00	2 89
43	2 do do	do	49 0	7 70	0 37	8 50	0 41
44	3 do do	do	38525 0	7 00	269 67	8 50	327 46
45	1 do second quality pine boards	do	3380 0	9 90	33 46	10 50	35 49
46	1½ do do	do	20392 0	9 90	201 88	10 50	214 11
47	1¼ do do	do	68655 0	9 90	679 68	10 50	720 87
48	2 do do	do	52908 0	9 20	486 75	10 00	529 08
49	3 do do	do	7971 0	8 50	67 75	10 00	79 71
50	4 do do	do	20 0	8 50	0 17	10 00	0 20
51	¼ do first quality do	do	270 0	11 90	3 21	18 00	4 86
52	½ do do	do	2588 0	11 90	30 79	18 00	46 58
53	1 do do	do	41999 0	11 90	499 78	18 00	755 98
54	1½ do do	do	78283 0	12 60	986 36	18 00	1409 09
55	1¼ do do	do	245385 0	13 30	3263 62	18 00	4416 93
56	1¾ do do	do	1150 0	13 00	14 95	18 00	20 70
57	2 do do	do	86380 0	12 60	1088 38	18 00	1554 84
58	3 do do	do	70665 0	11 90	840 91	16 00	1130 64
59	4 do do	do	122 0	11 90	1 45	16 00	1 95
60	2 do oak common	do	6240 0	25 20	157 25	27 50	171 60
61	2 do do first quality	do	30 0	35 00	1 05	37 50	1 12
62	3 do do do	do	556 0	35 00	19 46	37 50	20 86
63	⅛ do bass wood	do	1008 0	11 90	11 99	18 00	18 14
64	¼ do cherry	do	140 0	55 00	7 70	70 00	9 80
65	1 do do	do	1416 0	55 00	77 88	70 00	99 12
66	1½ do pine roofing boards	do	3950 0	8 40	33 18	10 00	39 50
67	1¼ do do tongued and grooved	do	78071 0	13 00	1014 92	15 00	1171 06
68	1 do do do	do	159 0	13 00	2 06	15 00	2 38
69	Common scantling	do	1327 0	7 70	10 81	9 00	11 94
70	do in long lengths	do	100 0	7 70	0 77	10 00	1 00
71	Second scantling	do	2191 0	9 90	21 69	10 50	23 00
72	do in long lengths	do	1928 0	9 90	19 08	10 50	20 24
73	Scantling for roof framing	do	48939 0	9 80	479 60	11 00	538 32
74	Joisting	do	2969 0	9 80	29 09	10 50	31 17
75	Red pine 12 × 12, 55.0 and 67 long	do	1464 0	12 00	17 56	16 60	24 30
76	Common oak scantling	do	300 0	25 20	7 56	27 50	8 25
77	Seconds do	do	114 0	25 20	2 87	27 50	3 13
78	Rolled iron joists	tons.	125.15.3.14	90 00	11321 43	110 00	13837 31
79	Wrought iron girder-rivetted plate	cwt.	19.1.14	6 50	125 93	7 50	145 21
80	Bar and round iron	do	71.2.17	3 25	233 87	4 50	322 43
81	Iron in blacksmith's shop not weighed, say			.....	50 00	.....	50 00
82	Oil putty	lbs.	2350 0	4 00	94 00	4 60	94 00
83	Glue, not weighed, say	do	25 0	0 20	5 00	0 25	6 25
84	Oil, not measured, say	gallons.	25 0	1 00	25 00	1 30	32 50
85	Cut nails	lbs.	296 0	0 04	11 84	0 05	14 80
86	6 inch pressed spikes	do	32 0	0 05	1 60	0 07	2 24
87	1¾ do brads	M	1 0	0 30	0 30	0 35	0 35
88	2 do screws, No. 6	dozen.	8 0	p. gross 0 25	0 17	0 30	0 20
89	1 do do, 8	do	9½ 0	0 30	0 24	0 36	0 29
	Carried over			.....	41492 48	.....	58174 99

SCHEDULE H.—Materials delivered for Parliament Buildings.—*Concluded*

No.	DESCRIPTION.		Quantities.		Schedule Price. Rate.	Schedule Price. Amount.	Valuation Rate.	Valuation Amount.
					$ cts.	$ cts.	$ cts.	$
	Brought forward.....				.....	41492 48	.....	584
110	1½ inch screws, No. 10.....	dozen.	34½	0	0 50	1 44	0 60	
111	2 do do 10.....	do	½	0	0 55	0 02	0 66	
112	2 do do 12.....	do	28	0	0 60	1 40	0 72	
113	2 do do 16.....	do	12	0	0 80	0 80	0 96	
114	2¼ do do 16.....	do	31	0	1 00	2 58	1 20	
115	2½ do do 18..... ..	do	12	0	1 25	1 25	1 50	
116	3 do do 18.....	do	4	0	1 50	0 50	1 80	
117	3 do do 20.....	do	2	0	1 75	0 29	2 10	
118	2 do brass axle pullies.....	No.	8	0	dozen 2 75	1 82	3 50	
119	2¼ do do	do	24	0	3 00	6 00	3 60	
120	Slates	square.	400	0	3 50	1400 00	6 00	2
	Carried to general summary.....					42,908 58	.....	60

THOMAS GUNDRY,
JOHN BOWES.

Ottawa, 28th January, 1863.

MATERIALS AT BRICK YARD.

					$ cts.	$ cts.	$ cts.	$
121	Bricks in kilns Nos. 1 and 2, west side of canal	M	323165	0	3 30	1066 44	6 00	19
122	Clay dug up and carted to clay mill	cube yd.	900	0	0 09	81 00	0 15	
123	Sand delivered.....	do	100	0	0 42	42 00	0 25	
124	Bricks in kilns Nos. 1 and 2, east side of canal.....	M	539350	0	3 30	1779 85	6 00	32
125	Clay dug up.....	cube yd.	930	0	0 09	83 70	0 15	
	Carried to general summary.....					3052 99	.....	

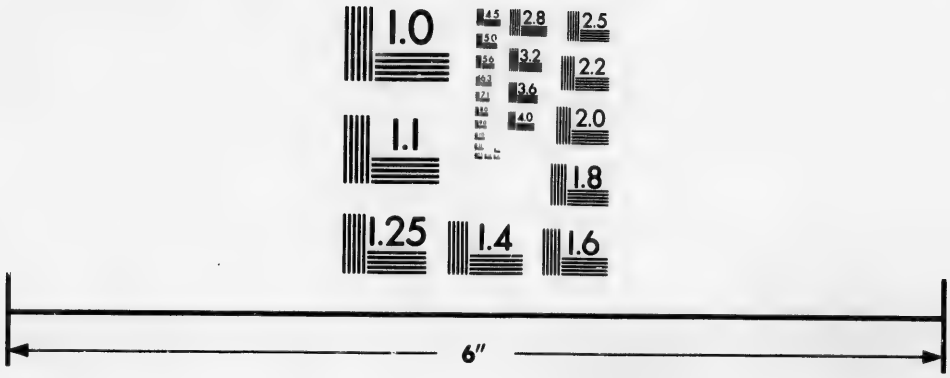
WM. HUTCHISON,
Clerk of Works, Eastern Block.

SCHEDULE I.—PARLIAMENT BUILDINGS.

Particulars of Valuation of Sheds and Plant.

		First Cost.	Present Value.
		$ cts.	$ cts.
-keeper's Office:			
356 feet B. M. framing, at	$18 00 per 1000 ft.	15 40	
132 do oisting, at	18 00 do	2 37	
267 feet sup. 1½ inch dressed flooring at	3 50 per 100 ft.	9 34½	
784 feet sup. 1 inch sheeting, at	3 00 do	23 52	
179 feet sup. 1 in. partition, at	3 50 do	6 26½	
12 feet lineal m ded capping, at	0 06 per foot.	0 66	
464 feet super. roof boarding and shingling, at	4 50 per 100 ft.	20 88	
675 do narrow clapboarding, at	2 25 do	15 19	
9 do shelf on beams	0 06 per foot.	0 54	
69 do 1 inch narrow batten doors, at	0 08 do	5 52	
3 qrs. 4-in. butts, at $0 15, $0 45; and 4-in. rimlock,	0 30	0 75	
pine desk, with 2 drawers		5 10	
68 ft. sup. 1¾-in. sash and casement, glazed, at	0 25 per foot.	17 00	
drawing-table, 2 large drawers and 3 trupels		7 00	
Depreciation 30 per cent		129 34	90 54
Shed near Contractor's Office:			
768 ft. lineal flatted timber, at	$ 0 04	30 72	
1256 ft. B. M. joists and sleepers, at	15 00 per 1000 ft.	18 84	
1076 do framing, at	16 00 do	17 22	
1530 ft. super. 1½-in. dressed flooring, at	3 50 per 100 ft.	53 55	
3770 do 1-in. rough sheeting, at	12 00 per 1000 ft.	45 24	
2880 do 1-in. roof boarding, at	12 00 do	34 56	
70 do 1¾-in. sash, glazed, at	0 20 per foot.	14 00	
68 do rough door and 1 pair hinges		2 00	
Depreciation 30 per cent		216 13	153 29
near Contractor's Office, Filled with Brick:—			
575 ft. lineal flatted timber, at	$ 0 04	23 00	
2387 ft. B. M. framing, at	16 00 per 1000 ft.	38 19	
5441 ft. super. 1-inch rough boarding, at	12 00 do	65 29	
3022 ft. B. M. 1½-inch rough flooring, at	12 00 do	36 26	
255 ft. super. 1¾-inch dressed flooring at	3 50 per 100 ft.	89 25	
Depreciation 30 per cent		251 99	176 39
e Shed South of Building:—			
140 ft. lineal flatted timber, at	$ 0 04	5 60	
1759 ft. B. M. framing, at	16 00 per 1000 ft.	281 46	
4934 ft. 1-inch roof boarding, at	12 00 do	179 20	
8326 ft. 1-inch rough clapboarding, at	15 00 do	424 89	
214 ft. B. M. oak, at	25 00 do	5 35	
145 lbs. screw-bolts, at	0 11 per lb.	15 95	
1448 lbs. bar iron fixed on track	0 08 do	115 84	
295 ft. super. 1¾-inch sash, glazed, at	0 20 per foot.	59 00	
Depreciation 30 per cent		1087 29	761 10
Travelling carriage, with iron crab		150 00	
Depreciation 20 per cent			120 00
adjoining the above, on South Side:			
130 ft. lineal flatted timber, at	$ 0 04	5 20	
1550 ft. B. M. framing, at	16 00 per 1000 ft.	24 80	
2504 ft. 1-inch roof boarding, at	12 00 do	30 04	
3078 ft. 1-inch rough clapboarding, at	15 00 do	31 17	
1 pair 14-inch T hinges		0 35	
Depreciation 30 per cent		91 56	09

IMAGE EVALUATION
TEST TARGET (MT-3)



Photographic
Sciences
Corporation

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

2.8
2.5
3.2
2.2
3.6
2.0
4.0
1.8
1.1
1.0

SCHEDULE I.—PARLIAMENT BUILDINGS.—*Continued.*

		First Cost.	Present Value.
		$ cts.	$ cts.
Shed East of Stone Shed :—			
635 ft. B. M. framing, at	$16 00 per 1000 ft.	10 16	
987 ft. 1-inch rough boarding, at	12 00 do	11 84	
987 ft. 1-inch roof boarding and shingling, at	4 50 per 100 ft.	44 62	
2666 ft. B. M. 3-inch rough floors and sleepers, at	10 00 per 1000 ft.	26 66	
32 do stand, at	15 00 do	0 48	
32 ft. super. 1-inch rough doors, at	0 04 per foot.	1 28	
3 pairs 14-inch T hinges and 2 9-inch board bolts		1 35	
128 ft. 1¾-inch sash, glazed, at	0 20 per foot.	25 60	
Depreciation 30 per cent		121 79	85 26
Stone Cutters' Shed :—			
180 ft. lineal flatted timber, at	$ 0 04	7 20	
3928 ft. B. M. framing, at	16 00 per 1000 ft.	62 85	
6225 ft. 1-inch roof boarding, at	12 00 do	74 70	
2121 ft. 1-inch rough clapboarding, at	15 00 do	31 82	
881 do sheeting, at	12 00 do	10 57	
60 do doors, at	0 04 per foot.	2 40	
3 pairs 9-inch T hinges and 1-7-inch stock lock		1 10	
324 ft. 1-inch boards, at	10 00 per 1000 ft.	3 24	
765 ft. 1¼-inch dressed flooring, at	3 50 per 100 ft.	26 78	
383 ft. B. M. joisting, at	15 00 per 1000 ft.	5 75	
837 ft. super. shingling, at	3 25 per 100 ft.	27 20	
531 ft. B. M. track, at	15 00 per 1000 ft.	7 97	
70 ft. super. 1¾-inch sash, glazed, at	0 15 per foot.	10 50	
282 do drawing board, at	0 06 do	16 92	
1 turning table 4 ft. diameter, complete		12 00	
Depreciation 30 per cent		301 00	210 70
Lime Shed, North of Legislative Council :—			
2114 ft. B. M. scantling, at	$12 00 per 1000 ft.	25 73	
1376 ft. 1-inch rough boarding, at	12 00 do	16 51	
Depreciation 30 per cent		42 24	29 57
Lime Shed South East of Tower :—			
96 ft. flatted timber, at	$ 0 04	3 84	
340 ft. B. M. scantling, at	12 00 per 1000 ft.	4 08	
576 ft. B. M. 2-inch rough flooring, at	10 00 do	5 76	
690 ft. 1-inch rough boarding, at	12 00 do	8 28	
Depreciation 30 per cent		21 96	15 37
Platform at Engine House :—			
28 ft. lineal flatted timber, at	$ 0 04	1 12	
480 ft. B. M. scantling, at	12 00 per 1000 ft.	5 76	
646 ft. B. M. 2-inch rough flooring, at	10 00 do	6 46	
Depreciation 30 per cent		21 34	9 34
Shed West of West Wing :			
200 ft. lineal flatted timber	$ 0 04	8 00	
1920 ft. B. M. scantling, at	12 00 per 1000 ft.	23 40	
7845 ft. 1-inch rough boarding, at	12 00 do	94 14	
1 bell cot and bell		7 00	
Depreciation 30 per cent		132 54	92 78

SCHEDULE I.—PARLIAMENT BUILDINGS.—*Continued.*

		First Cost.	Present Value.
		$ cts.	$ cts.
Carpenters' Shop :—			
11288 ft. B. M. framing, at	$16 00 per 1000 ft.	180 61	
120 ft. lineal flatted timber, at	0 04 per foot.	4 80	
6317 ft. sup. roof boarding and shingling, at	4 50 per 100 ft.	279 77	
6500 ft. B. M. 2-inch rough flooring, at	10 00 per 1000 ft.	65 00	
2414 ft. 1-inch rough flooring, at	12 00 do	28 97	
2425 ft. 1-inch rough clapboarding, at	15 00 do	36 38	
196 ft. super 1½-inch sashes and frames, glazed, at	0 25 per foot.	49 00	
280 ft. B. M. lintels and scantlings, at	12 00 per 1000 ft.	3 36	
182 ft. sup. 1¾-inch sashes, glazed, at	0 20 per foot.	36 40	
7 doors and frames, at	1 25	8 75	
Depreciation 30 per cent		693 04	485 13
Smiths' Shop and Sheds adjoining :—			
178 ft. lineal flatted timber, at	$ 0 04 per foot.	7 12	
2428 ft. B. M. rafters and joists, at	16 00 per 1000 ft.	39 71	
1440 ft. roof boarding and shingling, at	4 50 per 100 ft.	64 80	
1830 ft. 1-inch rough flooring, at	12 00 1000 ft.	21 96	
1710 ft. 1-inch rough clapboarding, at	15 00 do	25 65	
1232 ft. 1-inch sheeting (rough)	12 00 do	14 78	
300 ft. B. M. scantling, at	12 00 do	3 60	
107 ft. super. rough batten doors, at	0 04 per foot.	4 28	
28 ft. super. 1-inch cupboard front, at	0 07 do	1 96	
4 pairs strap hinges and 2 pairs 4-inch butts and dead lock		3 50	
2 pairs 3-inch butts and dead lock		0 50	
2 forges, 2 fire-places each, at	$20 00	40 00	
Depreciation 30 per cent		227 86	159 50
Engine House :—			
96 ft. lineal flatted timber, at	$ 0 04 per foot.	3 84	
1453 ft. B. M. joists and rough floor, at	12 00 per 1000 ft.	17 44	
2146 ft. B. M. framing, at	16 00 do	34 34	
1145 ft. 1-inch rough boarding, at	12 00 do	13 74	
798 ft. super. 1-inch roof boarding and shingling, at	4 50 per 100 ft.	35 91	
Louvers in roof		2 00	
20 ft. super. sky-light, glazed, at	0 02 per foot.	4 00	
18 do 1¾-inch sash, glazed, at	0 20 do	3 60	
64 do 1-inch rough doors, hinges and locks		4 00	
17 yds. rubble masonry, at	2 25	38 25	
Depreciation 30 per cent		157 12	109 98
1 8-horse power steam engine and hoisting apparatus		1200 00	
Depreciation 10 per cent		.....	1080 00
Shed West of Building :—			
1550 ft. 1-inch rough boarding, at	$12 00 per 1000 ft.	18 60	
200 ft. B. M. scantling, at	12 00 do	2 40	
40 ft. sup. 1-inch rough doors, at	0 04 per foot.	1 60	
2 pairs T hinges, at	0 20	0 40	
Depreciation 30 per cent		23 00	15 80
Contractors' Office :—			
1 brick safe, with iron door complete		110 00	
2 desks		36 00	
1 stove and pipes		15 00	
Depreciation 30 per cent		161 00	112 70

SCHEDULE I.—PARLIAMENT BUILDINGS.—*Continued.*

	First Cost.	Present Value.
	$ cts.	$ cts.
Dwelling Houses:		
Dwelling house and out offices, Wellington street	550 00	
Gate House	40 00	
Dwelling house, west of building	180 00	
do north do	140 00	
Depreciation 20 per cent	910 00	782 50
Plant:—		
7 pieces, 430 lbs., wrought iron purchase blocks, at 50c per lb	215 10	
1 do 16 inches, woooden snatch block, iron strapped	8 00	
23 do 13 do single block L. V. sheave, at 20c per inch	59 80	
2 do 14 do do do do at 20c do	5 60	
4 do 13 do double do do do at 30c do	15 60	
1 do 12 do do do do at 30c do	3 60	
1 do 10 do do do do at 30c do	3 00	
1 do 9 do single do do do at 20c do	1 80	
1 do 13 do double do not strapped at 22c do	2 86	
1 do 10 do single do do at 13c do	1 30	
2 do 13 do double do iron do at 45c do	11 70	
1 do 13 do single do do do at 35c do	4 55	
1 do 12 do single do no hook, at 32c do	3 84	
1 do 12 do single do complete, at 35c do	4 20	
1 do 11 do single do do at 35c do	3 85	
1 do 10 do double do not strapped, at 22c do	2 20	
1 do 12 do single do iron sheave, at 18c do	2 16	
1 do 14 do single do do at 18c do	2 52	
2 do 8 do double do do at 26c do	4 16	
1 do 14 do double do do at 26c do	3 64	
1 do 13 do double do do at 26c do	3 38	
1 do 12 do single do do at 15c do	1 80	
Depreciation, 30 per cent	364 56	255 19
155 lbs. cast iron sheaves. at 8c per lb	12 40	
17 do spun yarn, at 10c do	1 70	
4 do oakum, at 8c do	0 32	
	14 42	14 42
1441 lbs. scaffolding rope (hemp), at 15c per lb	216 15	
696 do line do do at 15c do	104 40	
Depreciation, 50 per cent	320 55	160 28
4289 lbs tarred line at 18c per lb	772 02	
Depreciation, 30 per cent	.....	550 41
375 lbs. Manilla line, at 12½c per lb	46 88	
Depreciation, 5 per cent	.....	44 53
62 lbs. sling rope, at 0 20 per lb.	12 40	
375 lbs. 7-16-inch proof chain, at 0 07 do	26 25	
277 lbs. ¼-inch do 0 07 do	19 39	
187 lbs. ½ and ⅜-inch do 0 07 do	13 09	
1050 lbs. ½-inch do 0 07 do	73 50	
Depreciation 20 per cent	144 63	115 70
5 brick buckets, iron straped, 3.6 ⋈ 3.6, at $ 2 00	10 00	
6 do do 3.6 ⋈ 3.0, at 1 75	10 50	
Carried over	.....	1140 53

SCHEDULE I.—PARLIAMENT BUILDINGS.—*Continued.*

		First Cost.	Present Value.
		$ cts.	$ cts.
Brought forward		.....	1140 53
1 do do 4 0 ⋈ 4.0		2 50	
1 do do 5.0 ⋈ 5.0		4 00	
1 do not strapped, 3.6 ⋈ 3.6		1 00	
45 mortar boxes, at	$ 0 45	20 25	
44 mortar boards, at	0 25	11 00	
7 grout boxes, at	0 50	3 50	
37 double hand-barrows, at	2 50	92 50	
42 single do	1 50	63 00	
27 hods, at	9 50	13 50	
27 wheel-barrows, at	2 50	52 50	
3 sand screens, 5.9 ⋈ 5.0, at	6 00	18 00	
9 lime pans, 9.0 ⋈ 5.0, at	3 00	27 00	
1 set whipple trees		5 00	
1 wooden fly wheel		4 00	
Depreciation 40 per cent		338 25	202 95
5 double hand-barrows, new, at	$ 2 50	12 50	
2 bob sleighs, not ironed, new, at	2 00	4 00	
1 brick moulding machine		100 00	
547 lbs. cast iron, for prymill, at	$ 0 05 per lb.	28 70	
1082 lbs. do for derrick, at	0 05 do	54 10	
		199 30	199 30
1 large stone sleigh		16 00	
Water cart, and cask and barrel		16 00	
250 rounds of ladder, at	$ 0 10	25 00	
Depreciation of 50 per cept		57 00	28 50
1 18-inch diameter grindstone, mounted		3 50	
1 35-inch do do		6 00	
1 34-inch d2 grindstone, not mounted		3 25	
1 saw sharping frame		2 50	
16 drawing boards, 580 ft. superficial at	$ 0 05 per ft.	29 00	
1 do 2 drawers, 42 ft. do at	0 10 do	4 20	
1 boiler, 70 lbs, at	0 15 per lb.	3 50	
1 18-inch circular saw and shaft		14 00	
533 lbs. 1¼-inch lead pipe, at	0 11 do	64 13	
Depreciation 12½ per cent		130 08	113 82
10 double benches, (joiners)	$ 5 00	50 00	
3 single do do	3 50	10 50	
6 bench screens, do	0 50	3 00	
3 trammels, do	0 50	1 50	
9 wooden squares, at	0 50	4 50	
2 iron cramps, (joiners)	8 00	16 00	
1 plaining bench, 24 ft. long		8 00	
3 box stoves, (3 feet,) at	$10 00	30 00	
40 links stove pipes, at	0 15	6 00	
1 pine desk, 2 drawers		5 00	
5 stools, at	$ 0 40	2 00	
6 pattern pails, at	0 25	1 50	
1 cupboard		4 00	
1 rough tool box, 4.6 ⋈ 3.0 ⋈ 3.0		2 00	
2 do 8.0 ⋈ 3·0 ⋈ 3.0, at	$ 3 00	6 00	
Depreciation 30 per cent		150 00	105 00
Carried over		.....	1790 10

SCHEDULE I.—PARLIAMENT BUILDINGS.—*Continued.*

		First Cost.	Present Value.
		$ cts.	$ cts.
Brought forward		.....	1790 10
3 pugmills at	$25 00	75 00	
2 iron crabs, at	30 00	60 00	
3 stone trucks, iron wheels, at	16 00	48 00	
1 do do at		35 00	
1 large derrick, main tower		200 00	
1 do library		60 00	
2 pairs shears, 45 feet long	$36 00	72 00	
1 do 40 do with wench		45 00	
2 do 30 do do at	$38 00	76 00	
1 do 26 do no wench		20 00	
3 pair gins, 18 feet, do at	$ 5 00	15 00	
Depreciatson 25 per cent		706 00	529 50
5 Drum windlasses, at	$16 00	48 00	
7 cisterns, 6.0 ⋈ 6.0 ⋈ 4,0, at	9 50	66 50	
28 2 ft. trussels, at	0 50	14 00	
18 3 ft. do at	0 65	11 70	
47 4 ft. do at	0 75	35 25	
18 5 ft. do at	1 10	19 80	
142 6 ft. do at	1 25	177 50	
18 8 ft. do at	1 50	27 00	
Depreciation 30 per cent		499 75	279 83
1 polishing frame		2 00	
4 do handles, at	$ 1 50	6 00	
18 do boxes, at	0 50	6 00	
21 reverses, at	0 50	10 50	
Depreciation 20 per cent		27 50	22 00
40 bankers, at	$ 0 50	20 00	20 00
9890 ft. B. M. Tramway, at	$12 00 per 1000 ft.	118 60	
120 ft. 1-inch boards, at	8 00	0 96	
140 lbs. iron on track, at	0 08 per lb.	11 20	
Depreciation 12½ per cent		130 76	114 42
10252 ft. B. M. framed scaffolding, at	$20 00	205 04	
450 ft. 1-inch boards, mortar beds, at	8 00	3 60	
4670 ft. B. M. runs, at	12 00	56 04	
5342 ft. do scaffolding scantling, at	9 00	48 07	
4500 ft. do shear tracks, at	12 00	54 00	
40 ft. do oak, at	25 00	1 00	
175 ft. do chain box, at	10 00	1 75	
		369 50	258 65
13094 ft. lineal scaffolding poles, at	$12 50 per M. ft.	163 68	
82 ft flatted cedar, at	0 03 per ft.	2 46	
25 ft. lineal derrick boom, at	0 25 do	6 50	
Depreciation 50 per cent		172 64	86 32
Tools, bellows, anvils, &c., &c., in blacksmith's shop		150 00	.....
Depreciation, 25 per cent		.....	112 50
Shovels, picks, drills, purchase screws, &c., taken as approximate		200 00	.....
Depreciation, 25 per cent		.....	150 00
Total		.....	$3363 32

SCHEDULE I.—PARLIAMENT BUILDINGS.—*Continued.*

	First Cost.	Present Value.
SUMMARY.	$ cts.	$ cts.
Dwelling houses	910 00	782 50
Sheds and travelling carriage	3660 00	2576 84
Steam engine and hoisting apparatus	1200 00	1080 00
Safe and office furniture	161 00	112 70
Plant:—		
Consisting of Derrick's tackles, carriages, implements of various kinds, and scaffolding	4813 84	3363 32
Total	$10,745 04	7,915 36

28th January, 1863.

JOHN BOWES.

SCHEDULE I.—PARLIAMENT BUILDINGS.

Plant in Brickyard West Side of Canal.

	$ cts.	$ cts.
Brickiln Shed, west side of Canal:—		
516 feet tamarac posts, at 7c per foot	36 11	
367 do do rafters and purlins, at 5c p r foot	18 35	
6547 do B. M. pine lumber, at $10 00 per M	65 47	
360 do common slabs, at 7 00 do	2 52	
	122 45	
Depreciation, 30 per cent		85 72
Brickfield, Racks and Shields:—		
2914 feet tamarac posts, at 5c per foot	145 70	
47540 do B. M. pine lumber, at $10 00 per M	375 40	
	521 10	
Depreciation, 25 per cent		390 83
Workmen's Shanties, and Stables:—		
3 shanties bricklined and plastered, $100 00 cash	200 00	
1 do do do 75 00 do	75 00	
1 stable for eight horses	140 00	
	415 00	
Depreciation, 25 per cent		311 25
	$1058 55	$787 80

SCHEDULE *i*.—PARLIAMENT BUILDINGS.—*Continued.*

	First Cost.	Present Value.
	$ cts.	$ cts.
Sundries west side of Canal:—		
Item 1.— 3 brick-making machines, at $100 00 each	300 00	
Do 2.— 18 wheelbarrows, at 3 00 do	54 00	
Do 3.— 9 do at 4 00 do	36 00	
Do 4.— 2 box-carts, at 20 00 do	40 00	
Do 5.— 1 lumber waggon	100 00	
Do 6.— 30 cases brick moulds, at $ 2 50 each	75 00	
Do 7.— 1 force pump	50 00	
Do 8.— 3 clay mills, at $ 40 00 each	120 00	
Do 9.— 3 turn tables, at 15 00 do	45 00	
150 ft. 1½-inch lead pipe, 600 lbs., at 0 11 per lb	66 00	
Levelling and fencing brickfield	700 00	766 00
	1586 00	
Depreciation, 15 per cent. Items 1 and 8, $357 00 Do 30 do do 2, 3, 4, 5, 161 00 Do 25 do do 6, 7, 9, 127 50	.....	645 50
	$1856 00	$1411 50

Additions brought forward.	First Cost.	Depreciation.
	$1058 55	$787 80
	1586 00	1411 50
	$2644 55	$2199 30

PLANT IN BRIDKYARD EAST SIDE OF CANAL.

Brickkiln Shed:—		
350 feet cedar posts, 9 inches, at 10c per foot	35 00	
1357 do tamarac do, 5 to 6 do, at 6c do	81 42	
5580 do B. M. pine lumber at $10 00 per M	55 80	
810 do common slabs, at 7 00 do	5 67	
8 pair of hinges, at 0 07 per pair	0 56	
Temporary covering small kiln	25 00	
2 stables at $18 00 each	36 00	
A workman's shanty	50 00	
	289 45	
Depreciation, 30 per cent	.....	202 62
Brick-drying Shed south side of Kiln:—		
11495 feet tamarac posts, 4 to 8 inches, at 5c per foot	574 75	
21741 do B. M. pine lumber, at $10 00 per M	217 41	
23232 do common slabs at 7 00 do	162 62	
112 pairs of hinges, at 0 07 per pair	7 84	
22 lbs. iron straps, at 0 07 per lb	1 54	
	964 16	
Depreciation, 10 per cent	.....	867 75
Brick-drying Shed north side of Kiln:—		
6120 feet tamarac posts, 4 to 6 inches, at 5c per foot	306 00	
1222 do B. M. pine lumber, at $10 00 per M	122 24	
11616 do common slabs, at 7 00 do	81 31	
88 pair of hinges, at 0 07 per pair	6 16	
	515 71	
Depreciation, 10 per cent	.....	464 14
	$1769 32	$1534 51

SCHEDULE *i*.—PARLIAMENT BUILDINGS.

PLANT IN BRICKYARD EAST SIDE OF CANAL.—*Continued.*

	First Cost.	Present Value.
	$ cts.	$ cts.
Sundries, part in Yard and part at the Parliament Buildings:—		
Item 1.— 3 clay mills in yard, at $25 00 each	75 00	
Do 2.— 1 do at building, at 18 00	18 00	
Do 3.— 2 wood pumps in yard, at 20 00 each	40 00	
Do 4.— 4 brick-making machines at the buildings, at $100 00 each	400 00	
Do 5.—21 wheelbarrows do do at 3 00 do	63 00	
Do 6.— 7 do do do at 4 00 do	28 00	
Do 7.—10 cast iron doors for kiln, at 1 00 do	10 00	
Do 8.— 2 box-carts, at 20 00 do	40 00	
Do 9.— 1 stone waggon	70 00	
	744 00	
Depreciation, 15 per cent. items 1, 2, 3 4, 7, $461 55 } Do 34 do do 5, 6, 8, 9, 140 70 }	.....	602 25
	$744 00	$602 25

Additions brought forward.	First Cost.	Depreciation.
	1769 32	1534 51
	744 00	602 25
	$2513 32	7136 26

Ottawa, 13th January, 1863.

WM. HUTCHISON.

SCHEDULE K.

Summary of Work prepared, and Materials delivered at the Eastern Block Departmental Buildings.

Contract Work	$29,575 26
Extra do	61 35
Additional Work	558 78
Heating and Ventilating	5,394 15
Total	$35,589 54
Commissioners valuation of the same	$43,205 45

BRICKS IN BRICK YARD.

Contract Work	$836 05
Commissioners valuation of the same	$1,739 77

Wm. HUTCHISON,
Clerk of Works, EasternBlock

SCHEDULE L.

Summary of Work prepared, and Materials delivered at the Western Block, Departmental Buildings.

Contract work	$12,347 71
Extra work	236 56
Additional work	6 00
Heating and ventilation	1836 96
Total	$14,427 23
Commissioners' valuation of the same	$17,523 87

Wm. HUTCHISON,
Clerk of Works, East Block.

he Eastern Block

.....	$29,575 26
.....	61 35
.....	558 78
.....	5,394 15
.....	$35,589 54
.....	$43,205 45

.....	$836 05
.....	$1,739 77

N,
ks, EasternBlock

Western Block,

.....	$12,347 71
.....	236 56
.....	6 00
.....	1836 96
.....	$14,427 23
.....	$17,523 87

ON,
s, East Block.

ck.

	Present Value.
	$ cts.
	454 70
	25 80
	158 37
	29 01
	165 75
	29 82
	19 82
	230 07
	196 70
	46 18
	112 80
	56 00
	1525 05

ck.

Present Value.
$ cts.
454 70
25 80
158 37
29 01
165 75
29 82
19 82
230 07
196 70
46 18
112 80
56 00
1525 05

SCHEDULE K.

DEPARTMENTAL BUILDINGS, EASTERN BLOCK.—MEASUREMENT OF WORKS

No.	DESCRIPTION.		Contract Work. Quantities.	Contract Work. Rates.	Contract Work. Amount.	Omissions from Contract. Quantities.	Omissions from Contract. Rates.	Omissions from Contract. Amount.	Quantities.
				$ cts.	$ cts.		$ cts.	$ cts.	
1	Pine lumber, first quality	B. M.	251058 0	13 30	3339 07				
2	do second do	do	180470 0	10 85	1958 09				
3	do third do	do	126644 0	8 40	1063 80				
4	do do do over 25 feet lengths	do	6170 0	12 00	74 04				
5	Oak do first do	do	30247 0	25 20	762 22				
6	do second do	do	30247 0	25 20	762 22				
7	Ash do first do	do	1176 0	17 60	20 69				
8	do second do	do	1176 0	14 40	16 93				
9	Butternut, first do	do	9969 0	30 00	299 07				
10	Pine lumber, broken out for framing	do	47900 0	13 30	637 07				
11	do do do	do	19974 0	10 85	216 72				
12	do do do	do							
13	do do circular do	do	753 0	13 30	10 14				
14	Labour, breaking out the above	do	59021 0	8 00	472 16				
15	do do do circular	do	579 0	16 00	9 26				
16	do do do straight	do							
17	Pine lumber in doors framed	do	8888 0	13 30	118 21				
18	Labour, breaking out and framing, not cramped up	7.0.3.2 & 2	157 doors.	1 40	219 80				
19	do do do do	8.4 & 3.4 & 2½	55 do	2 00	110 00				
20	Pine lumber in roof rolls for lead, second quality								
21	Labour, dressing do do	pieces.							
22	Grooved and tongued roof sheeting lumber, third quality		5184 0	8 40	43 54				
23	Labour, grooving and tongued do do								5184 0
24	Split cedar laths	laths.	325000 0	0 90	292 50				
25	Ohio sandstone in fancy blocks	cube feet.	6490 0	0 45	2920 50				
26	do blue do steps and landings	do	2154 0	0 45	969 30				
27	Brockville sandstone	do	606 0	0 45	272 70				
28	Gloucester limestone, in rough	do	226 0	0 25	56 50				
29	Rubble limestone, 216 ft. toise	toise.	1½ 0	3 50	5 25				
30	do Nepean do do	do	9¾ 0	19 00	185 25				
31	Ohio sandstone, prepared plain face	sup. feet.	959 0	0 42	402 78				
32	do do sunk	do	213 0	0 48	104 64				
33	do do chamfer	do	28 0	0 50	14 00				
34	do do moulding	do	433 0	0 55	238 15				
35	do do cabling	lin. feet.	36 0	0 15	5 40				
36	do do glass raggle	sup. feet.	50 0	0 07	3 50				
37	do do circular sunk	do	165 0	0 52	85 80				
38	do do do chamfer	do	263 0	0 54	147 42				
39	do do do moulding	do	30 0	0 62	18 60				
40	do cube feet in the above	cube feet.							
41	do do for additional	do							
42	Carving bosses	No. 4							
43	do large	8							
44	do griffins	2							
45	Carving garagolys, partly done	2							
46	Do shield for east door	1							
47	Do column cap	1							
48	Do royal arms, partly done	2							
49	Nepean stone facing, prepared	feet super							
50	Potsdam arch stone, do	do	249 0	0 45	112 05				
51	Nepean stone steps, in rough	feet cube.	169 0	0 42	70 98				60 0
52	Do do prepared	do							114 0
53	Labour dressing, do	feet super.							
54	Gloucester lime stone (arch stone), prepared	do							
55	Do do (ashlar) do	do							
56	Lime stone from excavtions, do	do							
57	Bricks	per M.	268600 0	3 50	940 10				
58	Slates	squares.	339 0	5 40	1830 00				
59	Iron joists (Fox & Burrett's patent)	per ton.	10.7.0.27 0	80 00	828 96				
60	Drift sand	yards cube.	606 0	0 50	303 00				
61	Pit do	do	119 0	0 30	35 70				
62	Gravel for concrete	do	967 0	0 98	947 66				
63	Glazed stoneware drain pipes, 15 inches diameter	yards lin.	12 0	1 53	18 36				
64	Do junction do, 15 do	do	¾ 0	3 06	2 04				
65	Do drain do, 12 do	do	8 0	1 23	9 84				
66	Do bends, 12 do	do	3¾ 0	2 26	8 28				
67	Do drain do, 9 do	do	60 0	1 02	61 20				
68	Do do do, 6 do	do	61½ 0	0 66	40 48				
69	Do do do, 4 do	do	31½ 0	0 39	12 22				
70	Do junction do, 4 do	do	⅔ 0	0 78	0 52				
71	Bar iron of different qualities	pounds.	5898 0	0 03½	206 43				
72	Boiler plate	do	948 0	0 04	37 60				
73	Scrap iron	do	800 0	0 60	4 80				
74	Hoop do	do	400 0	0 04	16 00				
75	Cast steel	do	2010 0	0 20	402 00				
76	Sheet lead	do	33606 0	7 30/56 cwt	2100 38				
77	Solder	do	25 0	0 50	12 50				
78	Bolt nuts (unscrewed)	do	146 0	0 08	11 68				
79	Spikes	do	1836 0	0 07	128 52				
80	Wrought nails	do	202 0	0 10	20 20				
81	Countersunk nails	do	264 0	0 15	39 60				
82	Clasped nails								
83	do griffins	No.							

SCHEDULE K.

SUREMENT OF WORKS PREPARED AND OF MATERIALS DELIVERED.

ns from Contract.		Extra Work.			Additional Work.			Heating and Ventilation.			Total Measurement.		
Rates.	Amount.	Quantities.	Rates.	Amount.	Quantities.	Rates.	Amount.	Quantities.	Rates.	Amount.	Quantities.	Rates.	Amount.
$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.
											251058 0	18 00	4519 04
											180470 0	10 50	1894 93
											126644 0	9 00	1139 79
											6107 0	9 50	58 01
											30247 0	37 50	1134 26
											30247 0	27 50	831 79
											1176 0	22 00	25 87
											1176 0	18 00	21 16
											9969 0	30 00	299 07
											47900 0	18 00	862 20
					4877 0	10 00	48 77				19974 0	10 50	209 72
											4877 0	9 00	43 89
											753 0	18 00	13 55
											59021 0	10 00	590 21
					4241 0	10 00	42 41				579 0	20 00	11 58
											4241 0	10 00	42 41
											888 0	18 00	159 98
											157 0	1 75	274 75
					1518 0	14 00	21 17				55 0	2 50	137 50
					420 0	0 05	21 00				1518 0	10 50	15 93
		5184 0	3 85	19 05							420 0	0 12	50 40
											5184 0		
											5184 0	15 00	77 76
											325000 0	1 25	406 25
											6490 0	0 70	4543 00
											2154 0	0 70	1507 80
											606 0	0 55	333 30
											226 0	0 25	56 50
											1½ 0	5 00	7 50
											9¾ 0	19 00	185 25
											959 0	0 25	239 75
											213 0	0 40	85 20
											28 0	0 30	8 40
											433 0	0 50	216 50
											36 0	0 15	5 40
											50 0	0 07	3 50
											165 0	0 50	32 50
											273 0	0 50	136 50
											30 0	0 75	22 50
					108 0	0 80	86 40				1730 0	0 70	1211 00
					No. 4	3 00	12 00				108 0	0 70	75 60
					8	9 00	72 00				No. 4	3 00	12 00
					2	20 00	40 00				8	9 00	72 00
							10 00				2	20 00	40 00
							85 00						10 00
							6 00						85 00
													6 00
					543 0	0 21	114 03						480 00
		60 0	0 42	25 20							543 0	0 27	146 61
		114 0	0 15	17 10							249 0	0 55	136 95
											169 0	0 42	70 98
											60 0	0 42	25 20
											114 0	0 18	20 52
								619 0	0 78	482 82	619 0	0 80	495 20
								5854 0	0 25	1463 58	5854 0	0 34	1990 36
								6591 0	0 25	1647 75	6591 0	0 34	2240 94
											268600 0	7 00	1880 20
											359 0	6 00	2034 00
											10.7.0.27 0	110 00	1139 82
											606 0	0 80	484 80
											119 0	0 50	59 50
											967 0	0 98	947 66
											12 0	3 00	36 00
											¾ 0	6 00	4 00
											8 0	2 00	16 00
											3⅔ 0	4 00	14 66
											60 0	1 55	93 00
											61½ 0	1 25	76 67
											31½ 0	0 95	29 77
											¾ 0	1 00	0 66
											5898 0	4 50 ℔ cwt	235 92
											940 0	5 00 ℔ cwt	47 00
											800 0	0 60 ℔ hd	4 80
											400 0	5 62 ℔ cwt	20 07
											2010 0	0 20	402 00
											33606 0	0 12½	4200 75
											25 0	0 60	15 00
											146 0	0 09	13 14
											1836 0	0 07	128 52
											202 0	0 10	20 20
											165 0	0 07	3 50
												0 50	

44	do griffins	No.									
45	Carving garagolys, partly done	8									
46	Do shield for east door	2									
47	Do column cap	2									
48	Do royal arms, partly done	1									
49	Nepean stone facing, prepared	1									
50	Potsdam arch stone, do	2									
51	Nepean stone steps, in rough	feet super									
52	Do do prepared	do	249 0	0 45	112 05						
53	Labour dressing, do	feet cube.	169 0	0 42	70 98						
54	Gloucester lime stone (arch stone), prepared	do									
55	Do do (ashlar) do	feet super.								60 0	
56	Lime stone from excavtions, do	do								114 0	
57	Bricks	do									
58	Slates	do									
59	Iron joists (Fox & Burrett's patent)	per M.	268600 0	3 50	940 10						
60	Drift sand	squares.	339 0	5 40	1830 00						
61	Pit do	per ton.	10.7.0.27 0	80 00	828 96						
62	Gravel for concrete	yards cube.	606 0	0 50	303 00						
63	Glazed stoneware drain pipes, 15 inches diameter	do	119 0	0 30	35 70						
64	Do junction do, 15 do	do	967 0	0 98	947 66						
65	Do drain do, 12 do	yards lin.	12 0	1 53	18 36						
66	Do bends, 12 do	do	3/4 0	3 06	2 04						
67	Do drain do, 9 do	do	8 0	1 23	9 84						
68	Do do do, 6 do	do	3 3/8 0	2 26	8 28						
69	Do do do, 4 do	do	60 0	1 02	61 20						
70	Do junction do, 4 do	do	61 1/4 0	0 66	40 48						
71	Bar iron of different qualities	do	31 1/4 0	0 39	12 22						
72	Boiler plate	do	3/4 0	0 78	0 52						
73	Scrap iron	pounds.	5898 0	0 03 1/2	206 43						
74	Hoop do	do	948 0	0 04	37 60						
75	Cast steel	do	800 0	0 60	4 80						
76	Sheet lead	do	400 0	0 04	16 00						
77	Solder	do	2010 0	0 20	402 00						
78	Bolt nuts (unscrewed)	do	33606 0	7 cwt	2100 38						
79	Spikes	do	25 0	0 50	12 50						
80	Wrought nails	do	146 0	0 08	11 68						
81	Countersunk nails	do	1836 0	0 07	128 52						
82	Pressed nails	do	202 0	0 10	20 20						
83	Finishing brads	do	264 0	0 15	39 60						
84	Clout nails	do	176 0	0 10	17 60						
85	Cut nails	do	95 0	0 07	6 65						
86	Slate nails (copper)	do	81 0	0 25	20 25						
87	Screw nails, 1 inch	do	854 0	0 04	34 16						
88	Do 1 1/2 do	do	463 0	0 60	277 80						
89	Do 2 do	gross.	9 0	0 36	3 24						
90	Do 3 1/2 do	do	13 0	0 60	7 80						
91	Tacks of different kinds	do	5 0	0 90	4 50						
92	Carriage bolts, 2 inches x 1/4 of an inch	do	1 0	1 75	1 75						
93	Do 2 1/2 do x 1/4 do	pounds.	79000 0	0 07	5 53						
94	Do 3 1/2 do x 3/8 do	bolts.	500 0	1 31	5 55						
95	Do 5 do x 3/8 do	do	800 0	1 38	11 04						
96	Do 6 do x 3/8 do	do	850 0	2 44	20 74						
97	Glue (No. 1 quality)	do	400 0	2 81	11 24						
98	Red lead (refined)	do	250 0	3 69	9 22						
99	Cotton (waste)	pounds.	90 0	0 45	40 50						
100	Glass (12 x 10)	do	200 0	0 09	18 00						
101	Window pullies (iron)	do	28 0	0 20	5 60						
102	Washers (one inch)	square.	106 0	0 06	6 30						
103	Slate dowels	pair.	4 0	0 20	0 80						
104	India rubber hose (two inches)	gross.	2 0	0 25	0 50						
105	Brass branches for do	boxes.	2 0	12 00	24 00						
106	Chimney bars	feet.	92 0	0 55	50 60						
107	Blacksmiths' coals		No. 2	3 40	6 00						
108	Oil, raw linseed	pounds.	45 0	0 06	2 70						
109	Do pale seal	chaldron.	3 0	10 00	30 00						
110	Do lubricating	gallons.	21 0	1 15	24 15						
111	Drying Japan varnish	do	13 0	0 80	10 40						
112	No. 19.—Sets of wrought iron safe doors, weighing	do	35 0	1 00	35 00						
113	Iron fluegals (prepared)	do	8 0	2 00	16 00						
114	Roof straps, do	pounds.	10925 0	200 each	3800 00						
115	Roach lime	do	2177 0	0 12	261 24						
116	Bricks in brickyard	do	2289 0	0 12	274 68						
		bushel.	645 0	0 14	90 30						
	Total	No.	288295 0	2 90 ⅌ M	836 05						
					$30,411 31						

										165 0	0 50	3 50
										273 0	0 50	32 50
										30 0	0 50	136 50
				108 0	0 80	86 40				1730 0	0 75	22 50
				No. 4	3 00	12 00				108 0	0 70	1211 00
				8	9 00	72 00				No. 4	0 70	75 60
				2	20 00	40 00				8	3 00	12 00
						10 00				2	9 00	72 00
						85 00					20 00	40 00
						6 00						10 00
				543 0	0 21	114 03						85 00
		60 0	0 42	25 20								6 00
		114 0	0 15	17 10						543 0	0 27	480 00
										249 0	0 55	146 61
										169 0	0 42	136 95
										60 0	0 42	70 98
										114 0	0 18	25 20
							619 0	0 78	482 82	619 0	0 86	20 52
							5854 0	0 25	1463 58	5854 0	0 34	495 20
							6591 0	0 25	1647 75	6591 0	0 34	1990 36
										268600 0	7 00	2240 94
										339 0	6 00	1830 20
										10.7.0.27 0	110 00	2034 00
										606 0	0 80	1139 82
										119 0	0 50	484 80
										967 0	0 98	59 50
										12 0	3 00	947 66
										½ 0	6 00	36 00
										8 0	2 00	4 00
										8½ 0	4 00	16 00
										60 0	1 55	14 66
										61½ 0	1 25	93 00
										31½ 0	0 95	76 67
										¾ 0	1 00	29 77
										5898 0	4 50 ℔ cwt	0 66
										940 0	5 00 ℔ cwt	235 92
										800 0	0 60 ℔ hd	47 00
										400 0	5 62 ℔ cwt	4 80
										2010 0	0 20	20 07
										33606 0	0 12½	402 00
										25 0	0 60	4200 75
										146 0	0 09	15 00
										1836 0	0 07	13 14
										202 0	0 10	128 52
										264 0	0 15	20 20
										176 0	0 10	39 60
										95 0	0 10	17 60
										81 0	0 25	9 50
										854 0	0 05	20 25
										463 0	0 05	42 70
										9 0	0 30	300 95
										13 0	0 50	2 70
										5 1	0 55	6 50
										1 0	2 00	2 75
										79000 0	0 08	2 00
										500 0	1 31	6 32
										800 0	1 38	6 55
										850 0	2 44	11 04
										400 0	2 81	20 14
										250 0	3 67	11 24
										90 0	0 45	9 18
										200 0	0 15	40 50
										28 0	0 20	30 00
										106 0	0 08	5 60
										4 0	0 20	8 48
										2 0	0 36	0 80
										2 0	18 00	0 72
										92 0	0 60	36 00
										No. 2	3 50	55 20
										45 0	0 08	7 00
										3 0	11 25	3 60
										21 0	1 25	33 75
										13 0	1 00	26 25
										35 0	1 20	13 00
										8 0	2 50	42 00
										10925 0	0 20	20 00
										2177 0	0 25	2185 00
										2289 0	0 12½	544 25
										645 0	0 20	286 13
				6135 0			558 78		3594 15	288295 0	6 00	129 00
												1729 77
												44,932 22

WM. HUTCHISON,
Clerk of Works, Eastern Block.

SUMMARY

Contract
Extra
Additional
Heating a

Commissio

Contract W

SUMMARY of

Contract work...
Extra work.....
Additional work.
Heating and ven

Total.

Commissioners' v

ock.

Present Value.
$ cts.
454 70
25 80
158 37
29 01
165 75
29 82
19 82
230 07
196 70
46 18
112 80
56 00
1525 05

SCHEDULE L.

DEPARTMENTAL BUILDINGS, WESTERN BLOCK.—MEASUREMENT OF WO

No.	DESCRIPTION.		Contract Work. Quantities.	Contract Work. Rate.	Contract Work. Amount.	Omissions from Contract. Quantities.	Omissions from Contract. Rate.	Omissions from Contract. Amount.
				$ cts.	$ cts.		$ cts.	$ cts.
1	Pine lumber, second quality	B. M.	69950 0	10 85	758 96			
2	Do third do	do	31146 0	8 40	261 63			
3	Do do do over 25 feet, lengths	B. M.	2500 0	8 40	21 00			
4	Grooved and tongued roof sheeting, 3rd quality	do						
5	Ohio sandstone, in quarry blocks	cubic feet.	3937 0	0 45	1771 65			
6	Ohio blue sandstone, steps and landings	do	397 0	0 45	178 65			
7	Potsdam arch stone, (in rough,)	do	146 0	0 40	58 40			
8	Rubble Nepean stone, 216 feet	toise.	4¼ 0	19 00	85 50			
9	Ohio sandstone, (prepared,) plain face	supl. ft.	218 0	0 42	91 56			
10	Do do sunk	do	71 0	0 48	34 08			
11	Do do chamfering	do	21 0	0 50	10 50			
12	Do do moulding	do	68 0	0 55	37 40			
13	Do do circular sunk	do	36 0	0 52	18 72			
14	Do do chamfer	do	44 0	0 54	23 76			
15	Do do moulding	do	3 0	0 62	1 86			
16	Do cubic feet, in the above	cubic feet.						
17	Carving bosses	No. 3		3 00	9 00			
18	Do column cap							
19	Nepean stone facing, (prepared)	supl. feet.						
20	Potsdam arch stone, do	do	160 0	0 54	86 40			
21	Nepean stone steps	cubic feet.						
22	Do do dressing	supl. feet.						
23	Gloucester limestone, (arch stone prepared,)	do						
24	Limestone from excavations, (Ashlar prepared,)	do						
25	Bricks delivered at the building	bricks.	239190 0	3 50	837 16			
26	Slates, do do	squares.	360 0	5 40	1944 00			
27	Iron joists, (Fox & Barrett's Patent,)	tons.	4.8.2.3 0	80 00	354 11			
28	Roof straps, prepared	lbs.	736 0	0 12	88 32			
29	Bolts, do	do	13 0	0 12	1 56			
30	Iron cresting do 11,523 lbs. equal to	feet.	1440½ 0	2 50	3601 25	only	partly	prepared.
31	Iron finials, prepared	lbs.	288 0	0 12	34 56			
32	Iron stanchion bars, prepared	do	962 0	0 12	115 44			
33	Bar iron, of different qualities	do	25776 0	0 03½	902 16			
34	Scrap iron	do	1000 0	0 60	6 00			
35	Russia plate	do	8 0	0 25	2 00			
36	Common plate	do	66 0	0 05	3 30			
37	Finials and cresting, partly prepared	do	561 0	0 12	67 32			
38	Felt 2368 square feet.	rolls.	12 0	6 30	75 60			
39	Blacksmiths coals	chaldrons.	19 0	10 00	190 00			
40	Coal tar	barrel.	1 0	1 00	1 00			
41	Drift sand	yards.	495 0	0 50	247 50			
42	Pit sand	do	67 0	0 30	20 10			
43	Gravel in concrete	do	223 0	0 98	218 43			
44	Roach lime	bushels.	1348 0	0 14	188 72			
	Total				$12,347 71			

SCHEDULE L.

MEASUREMENT OF WORKS PREPARED, AND OF MATERIALS DELIVERED.

Omissions from Contract.			Extra Work.			Additional Work.			Heating and Ventilation.			Total Measurement.		
uantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.	Quantities.	Rate.	Amount.
	$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.		$ cts.	$ cts.
												69950 0	10 50	734 47
												31146 0	9 00	380 29
			11205 0	12 25	127 26							2500 0	9 50	23 75
												11205 0	15 00	168 07
												3937 0	0 70	2755 90
												397 0	0 70	277 90
												146 0	0 55	80 30
												4½ 0	19 00	85 50
												218 0	0 25	54 50
												71 0	0 40	28 40
												21 0	0 30	6 30
												68 0	0 50	34 00
												36 0	0 50	18 00
												44 0	0 50	22 00
												3 0	0 75	2 25
												277 0	0 70	193 90
						No. 1	6 00	6 00				No. 3	3 00	9 00
			233 0	0 21	48 93							No. 1	6 00	6 00
												233 0	0 27	62 91
			66 0	0 42	27 72							160 0	0 55	88 00
			151 0	0 15	22 65							66 0	0 42	27 72
												151 0	0 20	30 20
									107 0	78 00	83 46	107 0	0 80	85 60
									7014 0	25 00	1753 50	7014 0	0 34	2384 76
												239190 0	7 [illegible]	1674 33
												360 0	6 00	2160 00
												4.8.2.3 0	110 00	486 48
												736 0	0 12½	92 00
only	partly	prepared.										13 0	0 12½	1 63
												1440½ 0	2 00	2881 00
												288 0	0 25	72 00
												962 0	0 25	240 50
												25776 0	0 04	1031 04
												1000 0	0 60	6 00
												8 0	0 30	2 40
												66 0	0 06	3 96
												561 0	0 20	112 20
												23 68-100	2 86	67 72
												19 0	11 25	213 75
												1 0	1 50	1 50
												195 0	0 80	396 00
												67 0	0 50	33 50
												223 0	0 98	218 54
												1348 0	0 20	269 60
					$236 56			$6 00			$1,836 96			$17,523 87

WM. HUTCHISON,
Clerk of Works, Eastern Block.

SUMMARY

Contract
Extra
Addition
Heating

Commiss

Contract

SUMMARY

Contract w
Extra wor
Additional
Heating a

Commissio

SCHEDULE M.

Departmental Buildings—Measurement of Plant at Eastern Block.

		First Cost.	Present Value.
		$ cts.	$ cts.
Scaffolding plank, 3-inch	83908 ft. B. M.		
do do	37344 do		
	121252, at $7 50	909 39	
Depreciated value			454 70
Gangways, long lengths, 5433 ft. B. M., at	$9 50	51 61	
Depreciated value			25 80
Temporary joists and supports, and lumber of different scantlings used as plant, 26264 ft. B. M	9 00	236 37	
Depreciated value			158 37
Square timber, 518 ft. cube, at	0 08 per ft.	41 44	
Depreciated value			29 01
Scaffolding poles, 40 feet long, No. 442, at	0 30 each.	221 00	
Depreciated value			165 75
Putlocks (iron-wood), No. 497, at	0 12 each.	59 64	
Depreciated value			29 82
Ladders, No. 18,397 ft., at	0 10 per ft.	39 70	
Depreciated value			19 82
Trestles, No. 127, 8 feet high, at	1 50 each.	190 50	
do 10, 6 do	1 25 do	12 50	
do 3, 5 do	1 25 do	3 75	
do 77, 4 do	0 75 do	57 75	
do 65, 3 do	0 65 do	42 25	
		306 75	
Depreciated value			230 07
Wheel-Barrows:—			
Wheel-barrows, No. 53 earth, at	2 50 each.	132 50	
do do 49 stone, at	2 50 do	122 50	
do do 2 brickyard	3 50 do	7 00	
do do 1 hand-cart		20 00	
		282 00	
Depreciated value			196 70
Hand stone-truck, with cast-iron wheels		14 00	
Scales at stone lights, 230 ft. B.M., at	0 02 per ft.	6 40	
403 lbs. iron straps, at	0 07	28 21	
		48 61	
Depreciated value			46 18
Hand-barrows, No. 51, at	1 50 each.	76 50	
Hods, 44, at	0 75 do	33 00	
Stone-boats, 18, at	1 75 do	31 50	
		141 00	
Depreciated value			112 80
Stone-boats (new, not made), No. 47, at	1 00 each.	47 00	
Wheel-barrow frames, 6, at	1 50 do	9 00	
		56 00	56 00
Carried over		2392 51	1525 05

SCHEDULE M.

Departmental Buildings.—Measurement of Plant, &c.—*Continued.*

		First Cost.	Present Value.
		cts.	$ cts.
Brought forward		2392 51	1525 03
Derrick Poles :—			
50 ft. long, 9 inches diameter, at	0 15 per ft.	7 50	
Jib 30 ft. long, 9 inches diameter, at 15c. and iron mounting		7 50	
Der. 35 do 11 do do 15c. do do		5 25	
Jib 30 do 11 do do 15c. do do		7 50	
Der. 30 do 9 do do 15c.		4 50	
Jib 26 do 9 do do 15c. and iron mounting		6 90	
3 derrick poles, 39 ft. = 117 ft. at 15c. per foot		17 55	
2 do 60 do 120 do 15c. do		18 00	
Two cross heads, with shelves, at $4 00		8 00	
Depreciated value		82 70	74 43
Traveller Frame, Main Sewer :—			
267 ft. cube lumber, at	$ 0 15 per ft.	41 55	
6876 ft. B. M. do	20 00 do	137 52	
Crab on traveller		25 00	
369 bolts and stages, at	0 07 per lb.	25 83	25 83
Depreciated value on first 2 items		229 90	193 67
Mortar Hoists, framed :—			
2981 ft. B. M. lumber, at	20 00	59 62	
1114 lbs. chain for hods, at	0 07 per lb.	77 98	
620 lbs. wheels (cast), at	0 04 do	24 80	24 80
Two horse-powers, complete, at	45 00	90 00	90 00
Depreciated value on first 2 items		252 40	123 84
Derricks, framed :—			
1142 ft. B. M. lumber, at	20 00 per M.	22 84	
47 lbs. bolts, at	9 07 per lb.	3 29	3 29
12 sett journals, at	1 00 each.	12 00	12 00
Depreciated value on first item		38 13	21 56
Mortar Mills, No. 2, complete, at	25 00	50 00	
Horse-powers, 4 do	50 00	200 00	
2 brick-making machines, at	80 00	160 00	
Depreciated value		410 00	348 50
Traveller Frame, Stone Cutters' Shop :—			
4090 ft. B. M. lumber, at	15 00 per M.	61 35	
320 ft. cube do	0 15 per ft.	48 45	
218 ft. B. M. hardwood, at	0 04 do	8 72	
2263 lbs. iron rail, at	0 05 do	113 15	113 15
Traveller and crab		180 00	180 00
Depreciated value on first 3 items		411 67	106 67
Carried over		3817 31	2842 99

SCHEDULE M.

Departmental Buildings.—Measurement of Plant, &c.—*Continued.*

		First Cost.	Present Value.
		$ cts.	$ cts.
Brought forward		3817 31	2842 99
Stone Cutters' Shed :—			
15477 ft. B. M. lumber, at	10 00	154 77	
440 cedars, 7 inches diameter, at	0 10 per. ft.	44 00	
50 stone-cutters' bunkers, at	1 25	62 50	62 50
		261 27	
Depreciated value on first 2 items		.....	149 08
Blacksmiths' Shop :—			
160 ft. tamarac joists, 6 inches diameter, at	0 05 per ft.	8 00	
2915 ft. B. M. lumber, at	10 00	29 15	
26 ft. glazed sash, at	0 20 per ft.	5 20	
6 30-100th square shingling, at	3 00	18 90	
930 bricks in chimney, at	12 50	11 62	
5½ yards masonry, at	2 67	14 24	14 24
		87 11	
Depreciated value		.....	62 79
Carpenters' Shop :—			
25709 ft. B. M. lumber, at	12 00	308 50	
483 cedar posts, 10 inches diameter	0 07 per ft.	33 81	
399 glazed sashes, at	0 20 do	79 80	
29½ square shingling, at	3 00	88 50	
200 ft. matched boarding, at	20 00	4 00	
		514 61	
Depreciated value		.....	463 15
Draughtsman's Office :—			
5459 ft. B, M. lumber, at	12 00 per M.	65 50	
70 cedar posts, 10 inches diameter, at	0 07 per ft.	4 90	
171 ft. glazed sash, at	0 20 do	34 20	
5 4-100 square shingling, at	3 00	16 12	
		120 72	
Depreciated value		.....	108 65
Enclosed Lumber Shed :—			
13358 ft. B. M. lumber, at	12 00	160 28	
716 tamarac posts, 5 inches diameter, at	0 05 per ft.	30 80	
162 ft. flatted timber, at	0 06 do	9 72	
		200 80	
Depreciated value		.....	184 72
Open Lumber shed, Store House, Mould Room, and Carving Shop :—			
19689 ft. B. M. lumber, at	$10 00 per M.	196 89	
912 ft. cedar posts, 6 inches diameter, at	0 10 per ft.	91 20	
18½ squares shingling, at	3 00	55 50	
204 ft. glazed sash, at	0 20 per ft.	40 80	
		384 39	
Depreciated value		.....	295 57
Carried over		5386 21	4183 69

SCHEDULE M.

Departmental Buildings.—Measurement of Plant, &c.—*Continued.*

		First Cost.	Present Value.
		$ cts.	$ cts.
Brought forward		5386 21	4183 69
Mortar Mill Shed:			
1420 ft. B. M. lumber, at	12 00	17 04	
151.73 ft. cube do at	0 15 per ft.	22 76	
7½ squares shingling, at	3 00	22 50	
Grinding and floor of do		80 00	80 00
		142 30	
Depreciated value on first 3 items		.....	59 19
Firewood Shed at Engine House:			
1367 ft. B. M. lumber, at	10 00 per M.	13 67	
150 ft. tamarac posts, 6 inches diameter, at	0 05 per ft.	7 50	
		21 17	
Depreciated value		.....	15 88
Steam House for Steaming Lumber, Brick, and Cement:			
2498 ft. B. M. lumber, at	12 00 per M.	29 97	
94 ft. flatted timber, at	0 06 per ft.	5 64	
84 ft. cedar posts, 10 inches diameter, at	0 07 do	5 88	
5 25-100 squares tar and gravel roof, at	4 00	21 12	
17595 bricks, at	$12 50 per M.	219 93	
144 yds plastering, in cement, at	0 15	21 60	
5 ft. glazed sash, at	0 20	1 00	
		305 14	
Depreciated value		.....	270 58
Engine House:			
2118 ft. B. M. lumber, at	11 00	25 41	
78 ft. flatted timber, at	0 07 per ft.	5 46	
5½ squares shingling, at	3 00	16 50	
30 ft. glazed sash, at	0 20	6 00	
11 ft. sheet iron chimney, at	0 25	2 75	
5909 bricks, at	12 00	73 86	
Ventilation on roof		3 50	
		133 48	
Depreciated value		.....	120 14
Stone Saw Frame:			
393 ft. dressed lumber, at	22 00	8 64	
131 ft. dressed hardwood, at	30 00	3 94	
18 turned rollers, at	0 25	4 50	
279 lbs. iron slides, planed, at	0 10 per lb.	27 80	
129 lbs. bolts and axletrees, at	0 08 do	10 52	
4 small cast-iron wheels		6 00	
		61 40	61 40
Clerk of Works Office:—			
2511 ft. B. M. lumber, at	15 00 per M.	37 66	
600 ft. grooved and tongued, at	20 00 do	12 00	
35 ft. glazed sash, at	0 20 per ft.	7 00	
281 ft. B. M. tables and desks, at	0 03 do	8 43	
3 85-100 squares shingling, at	3 00	11 55	
4 drawers, with locks, at	0 60 each.	2 40	
		79 04	
Carried over		6128 74	4790 88

SCHEDULE M.

DEPARTMENTAL BUILDINGS.—Measurement of Plant, &c.—*Continued.*

		First Cost.	Present Value.
		$ cts.	$ cts.
Brought forward		6,128 74	4,790 88
Clerk of Work's Office :—*Continued*			
One plain case		6 00	
One rack		2 00	
Stove and pipes		6 00	
400 bricks in chimney, at	12 00	5 00	
Office Stools		2 25	
		21 25	100 29
Foreman's Office—Same as above		100 29	100 29
Time-keeper's Office		16 00	
Stove and pipes		6 00	
		22 00	22 00
Watchman's Office		10 00	10 00
Water Tank :—			
1047 ft. B. M. lumber, at	$30 00 per M.	31 41	
373 lbs. iron hoops, at	0 03¾ per lb.	13 99	
Supports under do		6 00	
		51 40	
Depreciated value			43 09
Lead Pipes :			
73 ft. 1½-inch bore, 52½ lbs.			
262¾ ft. 2½ do 1839 lbs. } = 2859 lbs., at	0 11 per lb.	314 49	314 49
488 ft. 1 do 967 lbs.			
Pump logs, 410, 3-inch bore, at	0 15 per ft.	61 50	
		375 99	
Depreciated value on pump logs			56 13
Engine Shed at Canal :—			
2927 ft. B. M. lumber at	$12 00 per M.	47 12	
2 88-100 squares shingling, at	3 00 per sqr.	8 64	
Circular-saw frame and gearing		25 00	
Steam engine, 6-horse power		500 00	
Rotary pump (Halley's patent)		400 00	
Frame for do		10 00	
		997 06	
Depreciated value			645 40
Sheds Covering Brick Piles :—			
2588 ft. B. M. lumber, at	$10 00 per M.	25 88	
Iron rack, 331 do	10 00 do	3 31	
		29 19	
Depreciated value			21 90
Sundries :—			
26 patent rails, at	$ 0 20 each.	5 80	
8 watering cans, at	2 00 do	16 00	
37 old shovels, at	1 00 do	37 00	
		58 80	
Carried over		7,788 42	6,104 47

SCHEDULE M.

Departmental Buildings.—Measurement of Plant, &c.—*Continued.*

		First Cost.	Present Value.
		$ cts.	$ cts
Brought forward		7,788 42	6,104 47
Sundries.—(*Continued.*) Brought Forward		58 80	
3487 lbs. ropes, at	0 11 per lb.	383 57	
140 iron castings, at	0 04 do	5 60	
2 hand-saws, at	1 25 each.	2 50	
46 earth picks (old), at	0 50 do	23 00	
1 sett steel letters		2 00	
do figures		1 00	
4 levels, at	2 50 each.	10 00	
7 cornbrooms, at	0 25 do	1 75	
3 sand sieves, at	1 00 do	3 00	
2 water rams, at	25 00 do	50 00	
1 plumber's portable furnace		3 00	
20 oil cans and paint pots, at	0 30 each.	6 00	
20 plumber's soldering irons, at	1 50 do	3 00	
1 kit engineer's tools		5 00	
2 brass trammel heads, at	3 00 each.	6 00	
4609 lbs. quarry drills and bars, at	0 07 per lb.	322 63	
		886 85	
Depreciated value		.....	596 17
Tackle Blocks (wood):—			
1 12-inch double 12 inches			
8 10-inch do 80 do			
2 9-inch do 18 do			
8 6-inch do 38 do			
148 inches, at	$0 20 per in.	29 60	
1 12-inch single 12 inches			
14 10-inch do 140 do			
6 9-inch do 54 do			
3 8-inch do 24 do			
10 7-inch do 70 do			
2 4-inch do 8 do			
308 inches, at	0 12½ per in.	38 50	
		68 10	
Depreciated value		.....	57 10
Sundries in Store House:—			
2070 lbs. proof chain, at	$ 0 6½ per lb.	134 55	
360 lbs. quarry sledges and picks, at	0 20 do	72 00	
96 ft. leather belting, at	0 62 do	58 90	
1945 lbs. castings, derrick crabs, at	0 06 do	117 90	
2 pit saws, 6½ ft. long, at	7 00	14 00	
1 cross cut saw		5 00	
1 do		4 50	
2 bench vices, (iron), at	$10 00	20 00	
2 pair blacksmiths bellows, at	21 00	42 00	
15 pair do tongs, at	0 65	9 75	
6 pair do do at	0 60	3 60	
11 setts fire backs, at	2 50	27 50	
24 swedges, at	0 50	12 00	
5 screw wrenches, at	1 25	6 25	
3 anvils, at	18 00	54 00	
		581 95	
Carried over		9,266 52	6,758 58

SCHEDULE M.

Departmental Buildings.—Measurement of Plant, &c.—*Continued.*

		First Cost.	Present Value.
		$ cts.	$ cts.
Brought forward		9,266 52	6,758 53
Sundries in Store House.—*Continued.*			
2 blocks for do	1 50	3 00	
3 setts die plates and dies, at	10 00	30 00	
4 chopping axes, at	1 00	4 00	
12500 ft. fuse, at	3 10	38 75	
100 lbs. alum, at	0 08	8 00	
58 lbs. lamp black, at	0 10	5 80	
63 lbs. borax, at	0 25	15 75	
464 lbs. rope, (raw), at	0 11 per lb.	51 04	
128½ lbs. cast steel, ball and frame		40 55	
34 new shovels, at	$ 1 00	34 00	
863 lbs. iron tackle block, at	0 14	121 32	
		352 21	
Depreciated value		.....	790 40
Machinery and Tools in Carpenters Shop :—			
10 horse-power engine		1400 00	
1 Daniel's planer		328 00	
Tay & Co's., tenoning machine		183 00	
do sticker		224 00	
do perpendicular saw		160 00	
do irregular moulder		100 00	
do circular saw, from 6 to 16-inches		33 00	
do side-planer and borer		48 00	
do cut off saw		16 00	
do upright saw		100 00	
Lining cross-cut saw		26 00	
Circular ripping saw		40 00	
do do		25 00	
Grooving machine		28 00	
Saws and knives, connected with machine		100 00	
Turning lathe		40 00	
Turning do		35 00	
2½ ft. grindstone and grinding machine		12 00	
1 carpenter's cramp, (wood)		25 00	
Bench vice, (iron)		6 00	
8 carpenter's benches, double, at	$ 7 00	56 00	
3 do single, at	4 00	12 00	
3 cabinet maker's do at	12 00	36 00	
16 hand screws, at	0 50	8 00	
32 ft. 2-inch iron shafting, 470 lbs, at	0 07 per lb.	32 90	
17 driving pulleys, at	3 00	51 00	
270 ft. 2-inch India rubber belting, at	0 17 do	45 90	
48 ft. 8-inch do do	0 46 do	22 80	
No. 3.—4½ ft. stoves and pipes, at	34 00	102 00	
		3292 60	
Depreciated value		.....	2206 62
Two buildings occupied by foremen, Departmental Buildings, at $500 each.		1000 00	1000 00
Total Plant at Eastern Block		$13,911 33	$10,755 75

SCHEDULE M.

Departmental Buildings—Measurement of Plant at Western Block.

		First Cost.	Present Value.
		$ cts.	$ cts.
3 inch scaffolding planks per B M	36244		
2 do do do	76800		
	103044 at $7 50	772 83	
Depreciated value			386 4
Gangways, long lengths, 3325 ft., B. M., at	9 00	29 92	
Depreciated value			14 [illegible]
Temporary joists and supports, 14752 ft., B. M., at	9 00	132 76	
Depreciated value			92 [illegible]
Square timber, 155 ft., cube, at	0 08 per foot.	12 40	
Depreciated value			8 [illegible]
Scaffolding poles 49 feet long, 255 at	0 50 each.	127 50	
Depreciated value			95 [illegible]
Putlock (iron wood) 203, at	0 12 each	24 36	
Depreciated value			74 [illegible]
Ladders, 222 feet, at	0 10 per ft.	22 20	
Depreciated value			11 [illegible]
Trestles, 88—8 feet high, at	1 50 each.	132 00	
Do 152—4 do	0 75 do	114 00	
Do 34—3 do	0 65 do	22 10	
		268 10	
Depreciated value			198 [illegible]
Wheel-Barrows :—			
9 earth, at	2 50 each.	22 50	
6 hand barrows, at	1 50 do	9 00	
18 hods, at	0 75 do	13 50	
6 slime boats, at	1 75 do	10 50	
		55 50	
Depreciated value			38 [illegible]
Hand stone truck :—			
1 with cast iron wheels		14 00	
66 feet scales at stone lifts, at	0 02 per foot.	1 92	
741 lbs. iron straps, at	0 07	16 87	
		32 79	
Depreciated value			31 [illegible]
Derrick Poles :—			
30 feet long, 10 in. dia., at	0 15 per foot.	4 50	
Jeb 30 feet long, 9 in. dia., at	0 15 do	4 50	
1 60 feet, 10 in. dia. and cross head with shelves		13 00	
1 double geared crab		70 00	
3 sett lumber rollers, framed	3 50	10 50	
3 tool chests, 3 mortar pans, 20 mortar boards		28 25	
		130 75	
Depreciated value			117 [illegible]
Carried over		1609 11	1010 [illegible]

SCHEDULE M.

Departmental Buildings.—Measurement of Plant, &c.—*Continued.*

		First Cost.	Present Value
		$ cts.	$ cts.
Brought forward		1609 11	1010 42
Mortar wells, 1 at	25 00	25 00	
Horse power do d, at	40 00 each.	160 00	
		185 00	
Depreciated value			157 25
Mortar Hoist framed :—			
2981 feet, B.M, lumber, at	20 00	59 62	
1114 lbs. chain for hods, at	0 07 per lb.	77 98	
620 lbs. wheels cast, at	0 04 do	24 80	
Two horse powers, at	45 00 each.	90 00	114 80
		252 40	
Depreciated value			123 84
Derrick Framed :—			
480 feet, B.M., lumber, at	20 00	9 60	
15 lbs. bolts, at	0 07 per lb.	1 05	
Gearing complete		28 50	
		39 15	
Depreciated value			35 24
Stone Cutter's Shed, No. 1 :—			
7069 feet, B.M., lumber, at	10 00	70 69	
270 feet cedar posts to 8 in. dia., at	0 07 per foot.	18 90	
61 feet tamarac to 4 do	0 05 do	3 05	
		92 64	
Depreciated value			69 48
Traveller Framd at Stone Cutter's Shed :—			
3047 feet, B.M, lumber, at	15 00	45 70	
336 feet square do	0 15 per foot.	50 40	
209 do B.M, hardwood, at	0 64	8 36	
1783 lbs. iron rails, at	0 05 per lb.	89 15	
Traveller and crab		180 00	
		373 61	
Depreciated value			263 17
Stone Cutter's Shed, No. 2, and Iron Rack :—			
3129 feet, B.M., lumber, at	10 00	31 29	
133 do cedar posts, 8 in. dia., at	0 07 per foot.	9 31	
36 stone cutter's bankers, at	1 50 each.	54 00	
		94 60	
Depreciated value			84 45
Sheds covering Brick piles and Slates :—			
9237 feet, B.M., lumber, at	10 00	92 37	
Depreciated value			69 28
Lime Shed :—			
1676 feet, B.M., lumber, at	10 00	16 76	
1709 do common boards, at	7 00	11 90	
		28 66	
Depreciated value			21 50
Carried over		2767 54	2049 43

SCHEDULE M.

Departmental Buildings.—Measurement of Plant, &c.—*Contiued.*

		First Cost.	Present Value.
		$ cts.	$ cts.
Brought forward		2767 54	2049 43
Water Tank :—			
1047 feet, per B.M. lumber, at	30 00	31 41	
373 iron straps, at	0 03¾ each.	13 99	
12 feet, 2½ inch loose lead pipe, 84 lbs., at	0 11 per foot.	9 24	
755 feet pump logs, 3 in. bore, at	0 15 do	114 75	
120 feet, 1 in. bore gas pipe, at	0·22 do	26 40	
3 brass stop cocks, at	1 50 each.	4 50	
1 do do	10 00	10 00	
		210 29	
Depreciated value		.....	174 34
Stone Cutter's Shed, No. 3 :—			
6830 feet, B.M., lumber, at	10 00	68 30	
9 80 100 square shingling, at	3 00	29 40	
72 feet glazed sash, at	0 20 per foot.	14 40	
		112 10	
Depreciated value		.....	90 65
Blacksmith's Shop in front of Building, No. 1, Mould Rroom and Store House :—			
9343 feet, B.M., lumber, at	10 00	93 43	
143 feet cedar posts, 10 in. dia	0 09 per foot.	12 87	
14 56-100 square shingling, at	3 00	43 68	
54 feet glased sash, at	0 20 per foot.	10 80	
5½ yds. masonry, at	2 67	14 68	14 68
1300 bricks per M., at	12 50	16 25	
		191 71	
Depreciated value		.....	151 30
Foreman's office		80 00	
Guard-house at entrance gate		8 00	
		88 00	88 00
Blacksmith's Shop in front of Building No. 2 :—			
2609 feet, B.M., lumber, at	10 00	26 09	
951 bricks for chimney	12 50	11 87	
20 feet glased sash	0 20 per foot.	4 00	
4 17-27 yds. masonry, at	2 67	11 13	11 13
		53 09	33 86
Stables and Waggon Sheds :—			
12373 feet, B.M. lumber, at	12 00	148 47	
304 do tamarac posts, at	0 05 per foot.	15 20	
160 do cedar posts, at	0 07 do	11 20	
71 do do sleepers	0 07 do	5 04	
9 squares shingling	3 00	27 00	
30 feet glazed sash, at	0 20 do	6 00	
Cribs		4 00	
		216 91	
Depreciated value		.....	195 22
Carried over		3639 64	2308 61

SCHEDULE M.

Departmental Buildings.—Measurement of Plant, &c.—*Continued.*

		First Cost.	Present Value.
		$ cts.	$ cts.
Brought forward		3639 64	2808 61
Blacksmith's Shop, No. 3 :—			
9400 feet, B.M, lumber, at	12 00	112 80	
819 do tamarac posts, 6 in. dia., at	0 05 per foot.	15 95	
21 86-100 square shingling	3 00	65 58	
199 feet glazed sash, at	0 20 do	39 80	
4560 bricks, at	12 50	57 00	
2 ventilators on roof, at	3 00 each.	6 00	
5 tool drawers in benches, at	0 50 do	2 50	
20 20-27 yds. masonry	2 67	53 93	53 93
		353 56	
Depreciated value		.....	169 67
Iron and Coal Shed :—			
4850 feet, B.M. lumber, at	10 00	48 50	
245 do tamarac posts, 6 in. dia., at	0 05 each.	12 25	
8 94-100 square shingling, at	3 00	26 82	
24 feet glazed sash, at	0 20 per foot.	4 80	
		92 37	
Depreciated value		.....	83 41
Tools in Blacksmith's Shops Nos. 1 and 3.			
6 anvils, at	$18 00 each.	108 00	
6 wood blocks under anvils, at	1 50 do	9 00	
5 pair 2½ foot bellows, at	21 00 per pr.	105 00	
1 do 3 do do at		21 00	
1 do 2 feet 3 inches circular bellows, at		18 00	
1 portable forge and bellows, at		23 00	
29 pair tongs, at	0 65 per pr.	18 85	
7 anvil hammers, at	0 80 each.	5 60	
5 sledge do at	2 20 do	11 00	
2 set large swedge blocks, at	10 00 per s't.	20 00	
1 set templates for erecting		30 00	
20 patterns for do		30 00	
4 bench vices, at	10 00 each.	40 00	
20 small swedges, at	0 50 do	10 00	
1 cast iron heel plate		12 00	
12 cold chisels, at	0 20 each.	2 40	
6 pair small dividers, at	0 15 per pr.	0 90	
1 cast iron setting plate		14 00	
4 bell augers, at	0 40 each.	1 60	
1½ dozen plugs and feathers, at	0 95 per doz.	1 42	1 42
		486 77	
Depreciated value		.....	403 03
Sundries in Storehouse :—			
1415 pounds old ropes, at	$ 0 11 per lb.	155 43	
1744 do proof chain, at	0 06½ do	113 66	
418 do iron tackle blocks, at	0 14 do	58 52	
240 do quarry drills and bars, at	0 07 do	16 80	
7 barrels Hull cement, at	1 75 per brl	12 25	
5 shovels, at	1 00 each.	5 00	
1 2-foot boiler		3 50	
Carried over		4937 50	3520 07

SCHEDULE M

Departmental Buildings.—Measurement of Plant, &c.—*Continued.*

		First Cost.	Present Value.
		$ cts.	$ cts.
Brought forward		4,937 50	3,520 07
Sundries in Store House.—*Continued.*			
15 10-inch single-tackle blocks, 150 inches (wood)		20 75	
2 8-inch do do 166 do do	0 12½.		
5 10-inch double-tackle blocks, 50 do do		14 80	
3 8-inch do do 24 do do	0 20.		
3 8-inch do do 74 do do			
188 pounds new rope, at	0 11 per lb.	20 68	
100 do lamp black, at	0 10 do	10 00	
1 barrel rosin		17 00	
		83 23	
Depreciated value		.....	328 37
Total plant in western block		5020 73	3848 44

Departmental Buildings,—Measurement of Plant in Brickyard.

		First Cost.	Present Value.
		$ cts.	$ cts.
Brickkiln Shed:—			
3818 feet B. M. lumber, at	$10 00 per M.	38 18	
240 do cedar posts, at	0 10 each.	24 00	
162 do do at	0 07 do	11 34	
276 do tamarac do, at	0 05 do	13 80	
496 do common slabs, at	7 00 per M.	3 47	
		90 79	
Depreciated value		.....	54 48
Drying Shed and Sundries in Brickyard:—			
4207 feet B. M. lumber, at	$10 00 per M.	42 07	
8640 do common slabs, at	7 00 do	60 48	
22 wheel barrows (earth), at	2 50 each.	55 00	
10 do (brickmakers), at	3 50 do	35 00	
4 brickmaking machines, at	80 00 do	320 00	
2 cast iron rollers, at	20 00 do	40 00	
154 feet 1-inch gas pipe, at	0 22 per ft.	33 80	
		586 35	
Depreciated value		.....	501 10
Carried over		677 14	555 58

SCHEDULE M.

Departmental Buildings.—Measurement of Work in Brick Yard.—*Continued.*

		First Cost.	Present Value.
		$ cts.	$ cts.
Brought forward		677 14	555 58
Racks in Brickfield :—			
128130 feet B. M. lumber, at	$10 00 per M.	1281 30	
1800 do cedar posts, at	0 07 per ft.	126 00	
3000 do tamarac do, at	0 05 do	150 00	
		1557 30	
Depreciated value		.....	1167 98
Office and Tools in Brickfield :—			
1184 feet B. M. lumber, at	$12 00 per M.	14 20	
Door lock and hinges		1 60	
10½ feet glazed sash, at	0 20 per ft.	2 10	
16 shovels, at	1 00 each.	16 00	
50½ pounds crowbars, at	0 07 per lb.	3 54	
One small iron pump		10 00	
One large force do		65 00	
		112 44	
Depreciated value		.....	91 98
Clay Mills and Sheds :—			
670 feet B. M. lumber, at	$10 00 per M.	6 70	
2216 do common slabs, at	7 00 do	15 51	
4 clay wells complete, at	25 00 each.	100 00	
1 do do at		20 00	
4 turning tables, at	5 00 each.	20 00	
4 moulding do, at	1 50 do	6 00	
Brick moulds and shed on brickfield		50 00	
9729 feet B. M. lumber (new)	8 00 per M.	77 83	
		296 04	
Depreciated value		.....	270 81
Levelling brickfield, making drains, &c., &c		200 00	
Fencing do		100 00	
		300 00	300 00
Total plant in brickyard		2942 92	2386 35
SUMMARY.			
Plant at Eastern Departmental Building		13911 33	10,755 75
Do at Western do do		5020 73	3,848 44
Do at Brickyard		2942 92	2,386 35
Totals		$21874 98	$16,990 54

Wm. HUTCHISON.

SCHEDULE N.

LIST OF CERTIFICATES issued on Account of Public Buildings, Ottawa.

Date.	NAME.	No.	Amount.	PARTICULARS.
1859.			$ cts.	
May 28	James Doran	4486	217 00	Expenses of Governor General and Ministry, choosing site.
do 28	James W. Harper	4487	113 50	To pay sundry accounts connected with above.
June 6	D. Graham	4524	35 00	do pay list of Engineers, and Assistant Surveying Engineer.
do 24	do	4584	112 07	do do do do do do
July 8	Grand Trunk Railway Company	4693	60 00	Fare of His Excellency and Suite, Toronto to Ottawa and back.
do 14	Henry Lemmon	4716	28 80	Advertising in "Brantford Courier."
August 8	John M. Grant	4763	30 00	do notice to Architects.
do 10	Rollo Campbell	4780	37 82	do do "Pilot."
September 5	Fuller & Jones	4851	1600 00	Amount of premium for design.
do 5	Stent & Laver	4852	1400 00	do do do
do 5	Cumberland & Storm	4853	400 00	do do do
October 3	Thompson & Co	4952	23 56	Advertising notice to Architects.
do 5	Parsons & Finney	4964	20 56	do do
do 6	Augustin Côté	4981	25 58	do do
do 13	Duvernay & Freres	5059	34 52	do do
do 21	Jacques & Hay	5085	43 00	Expenses incurred exhibiting plans.
do 26	George Lanigan	5097	23 40	Advertising notice to Architects.
do 28	John Morris	5101	165 65	Services and travelling expenses per account.
November 15	S. Keefer	5914	163 24	To pay sundry petty accounts for advertising.
do 19	Fuller & Jones	5212	3000 00	On account of Professional services.
do 21	Stent & Laver	5219	2000 00	do do do
December 1	Thomas Fitzgerald	5245	200 00	Photographs.
do 3	D. Graham	5257	51 05	Expenses procuring specimens of building stone
do 10	John Morris	5298	169 52	Salary and travelling expenses, per account.
do 12	Ed. John Barker	5303	50 94	Sundry advertisements in "British Whig."
do 23	G. J. Barthe	5338	22 63	do do "Sorel Gazette."
do 23	Middleton & Dawson	5341	25 13	do do "Quebec Gazette.
	Total		$10,052 97	

DEPARTMENT OF PUBLIC WORKS,
30th December, 1862.

J. BAINE,
Book-keeper.

SCHEDULE N.—LIST OF CERTIFICATES issued on Account of Public Buildings, Ottawa.—*Continued*

Total			$10,052 97

DEPARTMENT OF PUBLIC WORKS,
30th December, 1862.

J. BAINE,
Book-keeper.

SCHEDULE N.—LIST OF CERTIFICATES issued on Account of Public Buildings, Ottawa.—*Continued*

Date.	NAME.	No. of Certificates	Amount.	PARTICULARS.
1860.			$ cts.	
January 4	S. W. Carman	5379	20 16	Advertising in "Belleville Independent"
Do 11	Henry Lemmon	5397	36 40	do "Brantford Courier"
Do 16	Charles W. Heath	5441	19 87	To pay sundry petty accounts.
Do 21	Desbarats & Derbishire	5494	219 68	Stationery supplied for Superintendent.
Do 23	James Beaty	5497	164 75	Advertising in "Toronto Leader."
Do 25	E. R. Fréchette	5504	43 24	do "Québec Canadien."
Do 27	D. Carey & Co.	5511	27 27	do "Quebec Vindicator."
February 1	Thompson & Co.	5522	41 87	do "Toronto Daily Colonist."
Do 9	John Morris	5553	278 95	Salary and travelling expenses for Dec. and Jan. last.
Do 13	Augustin Côté	5584	29 29	Advertising in "Journal de Québec."
Do 13	Stent & Laver	5585	1000 00	On account of professional services.
Do 16	S. B Foote	5594	110 72	Advertising in "London Prototype."
Do 24	Rollo Campbell	5624	83 12	Printing specifications.
March 1	Lowe & Chamberlin	5630	78 39	Advertising in "Montreal Gazette."
Do 3	Rollo Campbell	5635	52 58	do "Montreal Pilot."
Do 7	T. Trudeau.	5649	147 83	To pay sundry petty accounts for advertising, &c.
Do 9	Friel & O'Connor	5666	48 34	Advertising in "Ottawa Union."
Do 9	Cumberland & Storm	5667	1500 00	On account of professional services.
Do 10	John Morris	5673	120 00	Salary of self and watchman for February.
Do 10	G. T. Cary	5674	20 68	Advertising in "Quebec Mercury.
Do 12	Charles E. Zollikoffer	5678	60 00	Progress Estimate for February.
Do 12	W. W. Smith	5682	25 76	Advertising in "St. John's News."
Do 13	Fuller & Jones	5690	2000 00	On account of professional services.
Do 15	John McMullen	5695	27 96	Advertising in "Brockville Monitor."
April 4	Charles St. Michel	5729	61 34	do "Quebec Morning Chronicle"
Do 4	Parsons & Finney	5731	38 44	do "Montreal Commercial Advertiser.
Do 10	John Morris	5751	120 00	Salary of self and watchman for March.
Do 13	Desbarats & Derbishire	5781	144 50	Printing specifications, &c.
Do 14	E. Maunder	5783	74 52	Advertising in "Brantford Morning Herald."
Do 25	Duvernay Frères	5855	37 60	do "La Minerve," Montreal.
Do 27	Sparks & Cleverly	5867	45 25	Building specimen of masonry on Barrack Hill, Ottawa.
May 4	Richard Shaw	5883	40 89	Advertising in "British Standard."
Do 4	John Morris	5884	156 26	Pay list of self and assistants for April.
Do 4	Charles E. Zollikoffer	5888	140 00	Progress Estimate for April.

SCHEDULE N.—List of Certificates issued on Account of Public Buildings Ottawa.—Continued.

Date.		NAME.	No. of Certificate.	Amount.	PARTICULARS.
				$ cts.	
May	4	S. E. Foote	5889	63 22	Advertising in "London Prototype."
do	6	Stent & Laver	5922	1000 00	On account of professional services.
do	14	P. Jeffery	5907	63 22	Advertising in "Gait Reporter."
do	19	Thomas Mary	5924	133 40	Barrows, tea, cilling expenses, &c.
do	22	John Richmond	5905	20 44	Advertising in "Maple Leaf."
June	1	E. J. Oliver	6021	19 56	do "Barrie Advance."
do	5	S. L. Roberts	6022	33 12	do "Stratford Examiner."
do	6	John Morris	6031	198 67	Pay list of self and assistants for May.
do	8	Fuller & Jones	6007	2000 00	On account of professional services.
do	8	Stent & Laver	6003	1500 00	do do do
do	11	[illegible]	6002	20 00	Photographs furnished.
do	11	J. T. Bannerman	6004	74 81	Advertising in "Courrier du Canada."
do	13	Middleton & Dawson	6001	31 92	do "Quebec Gazette."
do	18	Wm. Kirby	6100	24 80	do "Niagara Mail."
do	22	Henry Rowe	6131	152 25	Printing specifications, &c.
do	23	George Lanigan	6123	41 76	Advertising in "Sherbrooke Leader."
July	11	John Rowlands	6201	29 37	do "Kingston Chronicle and News."
do	14	Robert Bell	6203	25 02	do "Ottawa Citizen."
do	14	James Beaty	6200	33 47	do "Toronto Leader."
do	14	S. McLaughlin	6279	24 00	Photographs furnished.
do	17	John Morris	6246	216 63	Pay list for self and assistants, for June.
do	17	O'Neil & Hand	6287	42 75	Advertising in "Toronto Mail."
do	21	Jones, Haynes & Co.	6291	1231 44	Fencing Market lot, and erecting small cottage thereon.
August	4	John Morris	6353	324 03	Pay list of self and assistants for July.
do	4	Armstrong & Bennett	6363	41 70	Advertising in "Kingston Herald" and "Advertiser."
do	7	R. W. Kelly	6431	33 76	do "Kemptville Progressionist."
do	7	G. J. Barthe	6412	20 07	do "Gazette de Sorel."
do	15	Stent & Laver	6422	1400 00	On account of professional services.
do	15	Fuller & Jones	6424	1700 00	do do do
September	6	S. McLaughlin	6468	24 00	Photographs furnished.
do	6	John Morris	6476	246 04	Pay list of self and assistants, for August.
October	4	John Morris	6575	385 43	do do do September.
do	18	Chs. E. Zollikofer	6722	60 00	Balance due to him for model of Library.
November	9	T. Trudeau ... portion	6827	324 07	To pay petty accounts for advertising, &c.
do	16	John Morris	6828		
December	11	John Morris	6916	399 46	Pay list of self and assistants for October; also, account for fitting up office.
					do do do November.
do	11	Robertson, Wilson & Co.	6906	47 40	Advertising in "Ottawa Daily."
do	11	Robert Bell	6905	157 12	do "Ottawa Citizen."
do	24	Chas. McCarthy	7007	56 70	Banking Plans
		Total		18,020 52	

		Fuller & Jones	6424	1700 00	do do do	
September	6	E. McLaughlin	6445	24 00	Photographs furnished.	
do	6	John Morris	6476	244 68	Pay list, of self and assistants, for August.	
October	4	John Morris	6575	386 42	do do do September.	
do	18	Chr. E. Zollikofer	6722	60 00	Balance due to him for model of Library.	
November	9	T. Trudeau ... portion	6527	326 67	To pay petty accounts for advertising, &c.	
do	16	John Morris	6623			
December	11	John Morris	6954	389 48	Pay list, of self and assistants, for October; also, account for fitting up office.	
					do do do November.	
do	11	Robertson, Wilson & Co	6956	47 42	Advertising in "Ottawa Times."	
do	11	Robert Bell	6966	157 [illegible]	do "Ottawa Citizen."	
do	24	Chas. McCarthy	7087	96 75	Banking Plans	
		Total		32,800 82		

DEPARTMENT OF PUBLIC WORKS,
30th December, 1862.

J. BAINE,
Book-keeper.

LIST of Certificates issued on Account of Public Buildings, Ottawa.—*Continued.*

Date.		NAMES.	No.	Amount.		PARTICULARS.
1861.				$	cts.	
January	12	John Morris	7109	346	68	Pay list, of self and assistants, for December, 1861.
February	4	do	7177	393	43	do do do January, 1861.
March	2	Stent & Laver	7242	2000	00	On account of professional services.
do	2	Gillespy & Robertson	7243	64	80	Advertising in Hamilton "Spectator."
do	7	Rollo Campbell	7255	43	20	Printing, specifications, heating and ventilation.
do	9	John Morris	7284	441	68	Pay lists, of self and assistants, for February,
do	13	John Page	7289	256	74	Travelling expenses.
do	15	Fuller & Jones	7291	2400	00	On account of professional services.
do	15	Cunningham, Barclay & Lindsay	7292	66	47	Carpeting supplied, office of clerk of works.
do	15	Henry Horne	7293	40	13	Stationery.
do	16	Fuller & Jones	7300	460	50	To pay accounts for printing and translating specifications.
do	28	Charles Garth	7317	800	00	On account of travelling expenses, and plans furnished.
April	8	William McLaurin	7355	101	20	Advertising in "Bytown Gazette."
do	8	Stent & Laver	7354	258	87	Sundry accounts paid by them.
do	10	John Morris	7374	346	68	Pay list, of self and assistants, for March last.
do	15	W. H. Higgins	7398	63	04	Advertising in "Whitby Chronicle."
do	18	Desbarats & Derbishire	7413	112	16	Printing forms of progress estimates.
May	10	John Morris	7451	346	68	Pay list of self and assistants, for April.
do	20	F. P. Rubidge	7520	120	00	To pay travelling expenses.
June	1	F. Stobbs	7535	21	39	Advertising in Three Rivers "Inquirer."

SCHEDULE N.—LIST of Certificates issued on Account of Public Buildings, Ottawa.—*Continued.*

Date.	NAMES.	No. of Certificates	Amount.	PARTICULARS.
1861.			$ cts.	
June 3	T. Trudeau	7547	80 00	To pay extra clerks employed.
do 10	Thomas Hewitt	7559	346 65	Pay list of clerks of works, for May last.
do 20	do	7616	143 33	do do Departmental Buildings, do.
do 25	Thomas McGreevy, portion of	7625	5150 00	Proportion of expenses attending Prince's visit, levelling grounds, and preparations for laying corner stone.
do 25	Stent & Laver	7628	844 00	On account of professional services.
do 27	Fuller & Jones	7631	1000 00	do do
July 3	John Leslie	7645	52 00	Brass plate for foundation stone.
do 3	Rice Sharpley	7646	73 32	Stationery furnished to clerk of works.
do 8	Thomas Hewitt	7662	404 66	Pay list of clerks of works, &c., for June last.
do 27	Stent & Laver	7737	360 00	On account of professional services.
August 2	Fuller & Jones	7750	500 00	do do do.
do 8	Thomas Monro	7788	113 75	Travelling expenses, Quebec to Ottawa and back.
do 10	Thomas Hewitt	7789	226 67	Pay list of clerks of works, Departmental Buildings, for June.
do 10	do	7792	226 67	do do Departmental Buildings, for July.
do 15	do	7820	414 91	do do Parliament Buildings, for July.
do 15	James Seymour	7827	37 44	Advertising in St. Catharine's "Constitutional."
do 23	J. H. Pattison	7849	33 00	Travelling expenses, Toronto to Ottawa.
do 27	Fuller & Jones	7858	374 79	On account of professional services.
do 27	Stent & Laver	7859	928 10	do do
do 31	Robert Bell	7871	226 56	Advertising in "Ottawa Citizen."
do 31	William Allen	7872	28 68	do "Aylmer Times."
August 31	Robertson, Wilson & Co	7873	28 68	Advertising in "Ottawa Banner."
do 31	Friel & Co	7873	192 76	do "Ottawa Union."
do 31	R. E. O'Connor	7873	146 74	do "Ottawa Tribune."
September 10	Thomas Hewitt	7904	800 32	Pay list, Clerks of Works, (Parliament and Departmental), August last.
do 11	Fuller & Jones	7908	810 19	On account of professional services.
do 26	Cumberland & Storm	7965	1000 00	do do
do 26	Stent & Laver	7969	263 90	do do
October 5	do	7996	600 00	do do
do 11	Fuller & Jones	8012	750 00	do do
do 12	Thomas Hewitt	8033	710 93	Pay list, Clerks of Works, (Parliament and Departmental), September last.
November 4	T. Trudeau	8103	910 00	To pay S. McLaughlin, on account of photographic apparatus.
do 7	do	8116	703 79	do sundry accounts.
do 15	[illegible]	8177	370 20	[illegible] do (Departmental) do
do 21	do	8193	220 00	Travelling expenses.
do 22	H. H. Killally	8212	41 92	Putting up stoves, &c., in Clerk of Works office.
December 6	N. Germain	8244	400 82	Pay list, Clerk of Works, (Parliament). November.
do 11	Thomas Hewitt	8283	283 32	do do (Departmental), do
do 12	do	8287	100 00	On account of salary.
	S. McLaughlin			

	31.....	R. E. O'Connor.....	7873	192 76	do "Ottawa Banner."
September	10.....	Thomas Hewitt.....	7873	146 74	do "Ottawa Union."
do	11.....	Fuller & Jones	7904	800 32	do "Ottawa Tribune."
do	26.....	Cumberland & Storm.....	7908	810 19	Pay list, Clerks of Works, (Parliament and Departmental), August last.
do	26.....	Stent & Laver.....	7965	1000 00	On account of professional services.
October	5.....	do	7969	263 90	do do
do	11.....	Fuller & Jones	7996	600 00	do do
do	12.....	Thomas Hewitt.....	8012	750 00	do do
November	4.....	T. Trudeau.....	8033	710 93	do do
do	7.....	do	8103	910 00	Pay list, Clerks of Works, (Parliament and Departmental), September last.
			8116	703 79	To pay S. McLaughlin, on account of photographic apparatus.
					do sundry accounts.
do	5.....	Thomas Hewitt.....	[illegible]	[illegible]	[illegible]
do	15.....	do	8177	370 26	do do (Departmental) do
do	21.....	H. H. Killally.....	8193	220 00	Travelling expenses.
do	22.....	N. Germain	8212	41 92	Putting up stoves, &c., in Clerk of Works office.
December	6.....	Thomas Hewitt	8244	400 82	Pay list, Clerk of Works, (Parliament). November.
do	11.....	do	8283	283 32	do do (Departmental), do
do	12.....	S. McLaughlin.....	8287	100 00	On account of salary.
do	21.....	Stent & Laver.....	8309	837 00	Travelling expenses on special services.
do	21.....	S. McLaughlin	8310	96 99	Balance of salary to 31st December, 1861.
do	31.....	Fuller & Jones	8329	800 00	Travelling expenses on special services.
		Total.....	.....	30,734 84	

DEPARTMENT OF PUBLIC WORKS,
30th December, 1861.

J. BAINE,
Book-keeper.

LIST of Certificates issued on Account of Public Buildings, Ottawa, from 1st January, to 29th December, 1862.

Date.		NAMES.	No. of Certificates	Amount.	PARTICULARS.
1862.				$ cts.	
January	14.....	Thomas Hewitt.....	8399	378 04	To pay pay list, Clerks of Works, Parliament Building, for December.
do	20.....	do	8437	283 33	do do Departmental do do
February	11.....	do	8519	236 66	do do Parliament do do
do	18.....	do	8546	283 33	do do Departmental do do
do	19.....	T. Trudeau.....	8549	186 00	do extra Clerks, for November and December last.
March	12.....	Thomas Hewitt.....	8592	236 66	do Clerks of Works, Parliament Buildings, January.
do	18.....	do	8637	350 03	do do Departmental Buildings, do
do	26.....	Stent & Laver	8655	400 00	Preparing drawings of Parliament and Departmental Buildings.
do	31.....	Thomas Hewitt.....	8668	90 25	To pay James E. Cole, salary.
April	15.....	do	8744	253 66	do pay list, Clerk of Works, Parliament Buildings, for March.
do	22.....	do	8759	284 98	do do do Departmental do do
May	15.....	Stent & Laver.....	8849	432 00	Travelling expenses, whilst assisting Hon. Mr. Killaly.
do	15.....	Thomas Hewitt.....	8861	283 33	To pay pay list, Clerks of Works, Departmental Buildings, for April.
do	15.....	do	8862	236 66	do do do Parliament do do

SCHEDULE N.—List of Certificates issued on Account of Public Buildings, Ottawa.—*Continued*

Date.	NAME.	No. of Certificates	Amount.	PARTICULARS.
1862.			$ cts.	
June 5	Thomas Hewitt	8914	236 66	To pay pay lists, Clerks of Works Departmental Buildings, for May.
do 13	do	8963	283 33	do do do Departmental do May.
do 11	T. Trudeau	8935	422 00	To pay extra Clerks employed.
July 4	Thomas Hewitt	9025	236 66	do pay list, Clerk of Works, Parliament Buildings, for June.
do 17	do	9096	301 83	do do do Departmental do do
August 6	do	9153	283 33	do do do do do July.
do 8	do	9164	236 66	do do do Departmental do do
do 25	Henry Horne	9222	71 35	Stationery furnished, Clerks of Works.
September 6	Thomas Hewitt	9261	236 66	To pay pay list, Clerks of Works, Parliament Buildings, for August.
do 6	do	9262	283 33	do do do Departmental do do.
do 18	T. Trudeau	9310	522 50	To pay salaries, &c., of extra Clerks.
do 25	Thomas Hewitt	9327	27 23	do rent of office, &c.
October 8	do	9376	519 99	do pay lists, Clerks of Works, for September.
do 25	Horace Merrill	9434	291 03	do men employed in protection of walls.
do 28	Stent & Laver	9460	40 00	Fuel supplied. Clerks of Works office, winter of 1860-61.
November 4	Thomas Hewitt	9476	519 49	To pay pay lists, Clerks of Works, for October.
do 13	John Page	9519	461 00	Travelling and other expenses, from 10th July to 31st October, 1862.
do 26	Horace Merrill	9568	897 87	To pay pay list, men employed for protection of Works.
do 26	J. R. Booth	9569	1064 36	Lumber furnished.
do 26	William Mason & Son	9569	99 48	do do
do 26	S. B. Tripp	9569	75 60	Roofing felt do
do 26	Workman Griffin	9569	135 70	Nails, &c., furnished.
December 1	T. Trudeau	9577	511 75	To pay salaries and travelling expenses of Clerks.
do 11	Thomas Hewitt	9603	519 99	do pay lists, Clerks of Works, for November.
do 18	John Page	9649	136 00	Travelling expenses, from 1st November to 4th December.
do 20	Horace Merrill	9657	123 30	To pay pay list, &c., for erection of watch-house.
do 29	T. Trudeau	9675	167 30	do salaries, &c., of extra Clerks.
	Total		12,639 33	

RECAPITULATION.

$ cts.

do	29.....	T. Trudeau.....	9675	167 30	do salaries, &c., of extra Clerks.
		Total	.....	12,639 33	

RECAPITULATION.

	$ cts.
1859.....	10,052 97
1860.....	19,830 82
1861.....	30,734 84
1862	12,639 33
Thomas McGreevy.....	483,163 95
Jones, Haycock & Co	511,391 54
Charles Garth.....	38,270 28
Total.....	$1,106,083 73

DEPARTMENT OF PUBLIC WORKS,
30th December, 1862.

J. BAINE.
Book-keeper.

SCHEDULE O.

Ottawa Buildings.—Estimate of External Work.

	$ cts
Excavating grounds	15,568 00
Excavating foundations, front walls	650 00
Sodding and planting grounds	20,000 00
Removing rubbish off grounds	1,000 00
Iron fence in front of grounds	13,000 00
Masonry in do do	8,400 00
Large gates	1,000 00
Roots	2,400 00
Lodge	3,000 00
Small gates	1,000 00
Steps	6,899 00
Macadamizing roads	10,800 00
Fencing round outside of grounds, 1000 yards	1,000 00
Engine fixed for supplying reservoir	5,000 00
Engine house, smoke shaft, complete	8,000 00
Cistern	5,000 00
Coffer-dams	2,000 00
Steps down bank, river	2,000 00
Piping to reservoir	2,000 00
Off take drain-pipes, from building to river	14,700 00
Excavation for do	3,000 00
Main pipes for conveying gas to buildings	2,258 00
	$128,675 00

PARLIAMENT BUILDINGS, OTTAWA.

General Summary.

	Valuation at Schedule and Progress Estimate Rates.	Commissioners' Valuation
	$ cts.	$ cts.
Measurement of work done, as per Schedule A	335498 67	328961 08
Measurement of work prepared, as per Schedule G	20511 10	27630 26
Measurement of materials on ground, as per Schedule H	42908 58	60894 46
Measurement of materials at brickyard, as per Schedule A	3052 99	5474 59
Day accounts, as per Schedule *A*	18503 36	18503 36
Total amount of work done and materials delivered	$420474 70	$441463 75
Plant, as per Schedule I	10052 12	10052 12
	$430526 82	$451515 87
Amount received by contractor	$483163 95	

Ottawa, 28th January, 1863.

THOMAS GUNDRY,
JOHN BOWES.

DEPARTMENTAL BUILDINGS, OTTAWA.—GENERAL SUMMARY.

	Eastern Block.		Western Block.		Both Blocks.	
	At Schedule and Progress Estimate Rates.	By Commissioners' Valuation.	At Schedule and Progress Estimate Rates.	By Commissioners' Valuation.	At Schedule and Progress Estimate Rates.	By Commissioners' Valuation.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Total amount of work done, as per Schedules B. and C	206,622 70	225,060 58	182,608 69	187,451 26	389,231 39	412,511 84
do of work prepared and materials delivered do K. and L.		43,202 45		17,523 87		60,726 32
do of bricks at brickyard do do		1,729 77				1,729 77
do of day accounts do L.		2,282 33		705 45		2,987 78
Total amount of work done and materials delivered		272,275 13		205,680 58		477,955 71
Plant at Works, Schedule M		10,755 75		3,848 44		14,604 19
do at Brickyard		2,386 35				2,386 35
Gross total	206,622 70	285,417 23	182,608 69	209,529 02	389,231 39	494,946 25
CONTRACT WORKS AND WORKS TO FINISH.						
Total amount of Contract Works	170,489 11		132,395 03		302,884 14	
do of Contract Work executed	69,614 39		54,443 03		124,057 28	
ESTIMATE FOR COMPLETION.						
Main Building, Schedules E. and F	185,444 04		130,983 50			
Works of Heating and Ventilation	24,418 01		27,309 33			
Total		209,862 05	158,292 83			
Works prepared and materials on ground, Schedules K. and L.	43,202 45					
Materials at brickyard	1,729 77		17,523 87			
Total		44,932 22				
Total amount required for completion		164,929 83	140,768 96			305,698 79
Total amount of money paid to Contractors		$511,391 54				

J. H. PATTISON.

By virtu

the

ma

test

in

JOHN M

I am

I came to

of Octobe

continued

explain t

ing. I p

puty Com

Messrs. F

with me

and they

there till

plain the

I sa

Gauvreau

stood, the

to the co

that the

to preven

ing the n

signing o

was to be

at which

show the

ders were

practice.

tender.

schedule

ing both,

Befo

the plans

APPENDIX.

By virtue of Her Majesty's Commission to inquire into the expenditure upon the Parliament and Departmental Buildings at Ottawa, and other matters mentioned therein, tested the 26th June, 1862, the following testimony was taken on oath as given by the several witnesses sworn in that behalf, at Ottawa.

4th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

VICTOR BOURGEAU, Esq., DAVID STARK, Secretary.

JOHN MORRIS, sworn says:

I am an architect by profession, have been engaged at the profession since the year 1837. I came to this province in 1855. In 1856 I was employed by Mr. Thomas till the month of October, 1856, when I was employed as clerk of works in the University buildings, and continued there in that capacity until the 14th October, 1859, when I went to Quebec to explain the plans, to such contractors as wished to examine them with a view to contracting. I put in a letter of instructions dated 12th October, 1859, from Samuel Keefer, Deputy Commissioner (No. 1). On the morning of the 14th October, 1859, I called on Messrs. Fuller & Jones in Toronto, and from them I got one set of plans, which I took with me to Quebec, they are the same as were used, and I think attached to the contracts, and they were the plans shown to parties who wished to tender. These plans remained there till the day tenders were to be received, the 15th November, and I remained to explain them.

I saw Mr. McGreevy once or twice, but I had little conversation with him. A Mr. Gauvreau and another gentleman took the measurements for Mr. McGreevy; as I understood, they had free access to the plans. The questions and answers which are attached to the contract were exhibited with the plans, to parties desiring to contract; this was done that the same views should be presented to all parties alike, who desired information, and to prevent any misunderstanding regarding verbal communications on the subject. During the month which intervened between the day for the delivery of the tenders, and the signing of the contract, I was engaged in preparing the schedule with the architects, which was to be appended to the contracts. These schedules were intended to show the prices at which the contractors were to be paid on their contract work, and were not intended to show the prices of extra work. The heading of the schedule was prepared before the tenders were delivered, and was intended to apply to contract and extra work, as is the usual practice. I was informed there was no schedule of prices attached to Mr. McGreevy's tender. I and the architects, directed by Mr. Keefer, Deputy Commissioner, prepared a schedule of prices for the progress estimates on the contract only, and the heading including both, was erroneously used; the direction given by Mr. Keefer was verbal only.

Before the contracts were signed, but after the tenders were given in, on examining the plans of the Departmental buildings, I discovered that there was not the required ac-

commodation, that the Provincial Secretary's Department had been altogether omitted, and also that the Customs and Auditor General's branches of the Finance Minister's Department had been placed in the wrong building. This I reported to Mr. Keefer personally, he replied the matter had then gone too far, and would require to be taken up at a subsequent period. I examined plans of the site which I found in the Department to see if the ground lines shown on the plans were the actual ground lines or assumed lines. I found the lines on the contract drawings were the assumed, not the real ground lines; this I also reported verbally to Mr. Keefer, pointing out to him that there would necessarily be large extras on the foundations, and in the depth of the walls. Upon this I made a plan of the ground, from the plan I found in the office, and this plan was substantially correct as the ground was found. This plan was not attached to the contract although it was completed before the contract was signed. The plan attached to the contract, was the one showing the imaginary line of level. On the 12th December, my plan was adopted as the one by which the architects were to take the levels for each building, which of course entitled the contractor to extra or additional work, to the extent which the one differed from the other. The plan is put in marked A. I suggested an order book and prepared the form One blank put in No. 1½. I showed Mr. Keefer the draft of it, and he approved of it with one alteration, that it should bear the signature of the clerk of works, which my form did not. This was intended to prevent misunderstanding about what works had and had not been ordered. I also suggested that books should be printed with the contracts and specifications for easy reference. They were in progress when I left, but they did not contain the conditions attached to the specification.

On the 13th December, 1859, I was appointed clerk of works for all the buildings, but my appointment dated from the 9th. I immediately went to Ottawa, and arrived there I think, on the 18th December, and reported myself according to instructions. The duty of clerk of works is to take order from the architects for the doing of works, to superintend those works, and to see that the material is good, and work done according to the specification. It is the duty of the contractors to set out the foundations, and to do the work under the superintendence of the architects and clerk of works.

On my arrival at Ottawa I found the Parliament building partly staked out. The snow was deep, some stakes I think had been put in for the Departmental buildings. I did nothing more than see that they were in point of position, in accordance with the plan A. already put in. I was absent on leave for about three weeks, from the 20th or 21st December, and on my return I found a little excavation had been done for the great tower and the hall. This excavation was stopped at the time I returned, and did not proceed again till the thaw in the spring, about the early part of April. The rock excavation under the contract proceeded from January during the winter. Soon after the rock excavation was commenced, I heard that tenders had been received for heating and ventilating the buildings, and soon after Mr. Garth came to Ottawa with the plans. The precise time I do not remember, but I think it was about the 1st February, 1860.

He was in communication with the architects, but I was in occasionally and there was some modification, I think, made. I laid out the boiler house, under whose orders I cannot say, but it must have been one of the architects; Mr. Garth was here at the time, and, I think, he left a tracing of his plan for heating and ventilating the buildings, but Mr. Keefer did not come till about the 10th of April. The contract plans on the Parliament Buildings assumed two feet of excavation to be necessary for all the work; so far as the excavation exceeded two feet it was extra. About the 25th of February I received, from the Secretary of the Department of Works, a letter of the 22nd, enclosing an order to Messrs. Fuller & Jones, the architects, which they had sent the Commissioner of Public Works for approval. It was an order on Mr. McGreevy, the contractor, to excavate the grounds for the various foundations. I gave the order, as directed, to the architects; I think it ought to have been sent to them; I cannot explain why it was sent to me. The letter to me is No. 31,034, subject No. 1,026 of the Department.

This order and a similar one for the Departmental buildings, are the orders upon which the excavation for the foundations were executed. I superintended the excavations alone under the directions of the architects. There is no useless or waste excavation of

rock connected with the heating and ventilation. Under the western wing and under part of the Legislative Chambers and smoking room, where the rock was excavated for the air ducts, the remaining rock was so loose and shattered, as to be unfit for foundations, and it had to be removed altogether It was more like boulders put together than beds of rock, but the top was smooth. No rock was unnecessarily removed, but in blasting for the boiler house it occasionally happened that a part of the solid rock was torn up, which had to be replaced by rubble work, where the walls were. There was some unnecessary excavation between the two wings, it was about 6 or 7 feet wide, of an average depth of 6 to 7 feet. I cannot account for the error unless that the stakes got knocked down in the thaw. The rock taken for the foundations was thrown in heaps, and such parts of it as were fit, were built into the walls in the foundations, and the waste part is yet in heaps. The clay excavated from the west wing was used to fill up a ravine near the west end of the building. The eastern departmental building is about 3 feet 8 inches lower in the ground than was originally contemplated. This saved a great deal of rock excavation under it. As it is, the chief extra work, is the rock excavation for the heating and ventilating.

In the foundation there is little extra excavation, and no unnecessary excavation was done there. There was extra earth excavation; for on the southern part the rock was found 13 feet from the surface, and the foundations went to the rock. The earth was troublesome, and had to be removed to a spoil bank, and thence brought back for filling in. The depth was so great, that the trenches for the foundations had to be wide at top and slope much. This caused more excavation than if the depth had been less or the earth firmer than it was. The upper part was loose sand, the middle clay, and the bottom hard-pan full of water, so that it required pumping during the progress of the works.

The ground on which the western departmental building stands, sloped from the north to the south so much, that the bottom of the foundation at the south end was but 17 inches below the ground level, while that at the north was 14 feet below the ground level; the first 9 feet clay, the last 5 feet rock. I do not know how much it fell short of, or exceeded the contract plan. There was no unnecessary work done there in the way of excavation.

There were plans for the drains of the Parliament buildings in the original plans of the work, but no plan for drains for the Departmental buildings, but provision was made for their construction in the contracts, and the plans of these drains did not contemplate the depth of the boiler houses; the heating and ventilating apparatus which was made about ten feet lower than the bottoms of the originally contemplated drains. The consequence was the drains had to be excavated on levels lower than the bottoms of the boiler houses to prevent their being flooded with them. The deepening of these drains 10 feet was additional work. The drain of the Parliament building runs west from the boiler house through the ravine to the bank of the river on the west; this, also, is the nearest to the building. The drain was put in this ravine, so far as it went, to prevent excavation; the excavation, till it came to the ravine, was chiefly rock. The excavation was more expensive then was contemplated, as the pitch of the rock was against the run of the drain; it disturbed two or three beds of the rock, this required the splitting of the beds, and making up the uneven bottom of the excavation with masonry. The boiler houses in the respective Departmental buildings are also 10 feet below the level of the contemplated drain, and caused the system of drainage to be 10 feet lower than was originally supposed. In the heating and ventilating Mr. Garth required most of the air ducts to come from the north; advantage was taken of several of these to make the drains under the ducts, which saved the upper excavation, and this drain run into one from the Parliament building, which saved excavation so far as it went. The drain from the west Departmental building was made in a ravine running in a westerly direction from the boiler house to the bank; this is the shortest drain as the ground fell towards the west; the slopes in the cross section of the drain were at the rate of 6 feet to 50 feet; this drain was expensive, as the bed of rock lay in an almost perpendicular direction, and the blasting was in the layers rather than in the beds, and the shots had little effect. The heating and ventilation were the cause of the chief part of the extra excavations, and the increased depth brought these

excavations into water which added to the expense. The course of these drains was pointed out to Mr. Keefer on one of his visits—about the month of April, 1860, and he approved of them

---

5th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

VICTOR BOURGEAU, Esq., DAVID STARK, Secretary.

JOHN MORRIS,—Examination continued.

The drain was made under my supervision from plans furnished me by the architects; they are made according to these plans, with slight alterations. I found, in the office of the Department at Quebec, plans of the contour of the ground, from which I made the plan A, which I put in; I found one plan, from which I worked, in the Assistant Engineer's room. I know of no other error or extravagance in the excavation than I have already spoken of. I have nothing further to say about excavation. I got plans from the architects of the Departmental buildings, on the same scale as the contract plans, 12 feet to an inch, but I got no plans showing the distances of the walls apart, and I had to work from the scale; the usual well-known rule is, that the architects should furnish the working plans on which the distances between and the thickness of the walls are designated by figures, but these, as regards the Departmental buildings, I never got. I got one sectional plan of the front walls on a scale, I think, of half an inch to the foot. I laid out walls from the scale plan, but went over some of it carefully and figured it myself. I had laid out the eastern Departmental building so that the masonry was commenced on the 2nd April, 1860. There had been some men employed in stepping the trenches for one foundation as they were sloping so much from the character of the rock. The work was begun on one of the chief longitudinal walls. The mason work, during April, was confined mostly to the east departmeutal building. In the meantime, during the early part of April, the excavation in the boiler house had been completed, and the trenches levelled. About the 23rd or 24th April I laid out one foundation of the library, and the masonry was commenced on the 26th April on the Parliament building, and I continued steadily on, giving the various points as the workmen required them. In May, I laid the boiler house, Legislative Council Chamber, and Picture Gallery, and rooms and adjoining.

In June the workmen proceeded on those parts, and during the month I laid out the main tower, and the east wing was begun. In July the workmen continued on the work so laid out. I had no assistance till the 19th April, when Mr. Hutchison came, and he was employed on the departmental buildings. I had no assistant on the Parliament building till about the middle of June, when Mr. Grist came with Mr. Keefer, and he continued on. I laid out the foundation walls of the centre of the Parliament building, the Library, the kitchen, the boiler house, central hall and tower, the halls under the Legislative Council Chamber and rooms adjoining, the walls under the Post Office, and front rooms east of the main tower, and the main lines of the east wing. These are all the foundations I laid out, the rest were laid out, as I believe, under Mr. Grist.

I applied for assistance on the 31st March, by letter, and I spoke to Mr. Keefer about it. I did not get any assistance till the times I have mentioned. The foundation plans for the Parliament building, which I got from the architects, were on a scale of 10 feet to an inch, but they were chiefly figured, so that I could easily lay out the walls. I had also sections and elevation plans on a large scale. From the foundation plans I got I laid out the walls, and I superintended the whole building; but after July, I could not spend my whole time, as I was after that time in correspondence directly with the department; I had besides the charge of the grounds. The correspondence was not private, it had

reference to the works and grounds. By the contract, the contractors had the right to make brick on any of the unlocated Ordnance lands.

About the 16th January, Messrs. Jones & Haycock, had applied to me for part of the Ordnance lands to make brick. I sent their application to the department, and in reply received the letter of the department, dated the 23rd January, 1860, (No. 30,536 of the department.) On receipt of this I communicated with Messrs. Jones & Haycock, and on the 1st of February, 1860, they applied to me for that portion of lot D, in concession C, of Nepean, on the west side of the deep cut of the Rideau Canal, then occupied partly by one McDermot, Widow Healy and Richard McCann, with 600 feet of the spoil bank on the west side of the canal. I sent a copy of their application and my report upon it to the department on the 3rd February, 1860. I had no reply from the department, but a letter from Col. Coffin, of the 20th February, to say they could have what they applied for.

On the 15th February, 1860, I had a letter from the department, (No. 30,934,) telling me that a suggestiou had been made to the department for facing the Parliament and Deyartmental buildings with sandstone throughout, and that estimates for the difference had been submitted. I was requested to furnish the Commissioner of Public Works, confidentially, with my views ; first, as to to the quality of the Nepean and Templeton sandstone, its architectural effect, and durability as compared with limestone. Second, my opinion as to the difference of cost. In answer to this I reported my opinions and views to the department on the 22nd February, 1860. It is printed in the Blue Book, page 259.

I received about the 25th March, 1860, a letter from the department of the 23rd March, (No. 31,366 of the department,) directing me to furnish as soon as possible, a schedule of the prices upon which the extra work of the new building should in my opinion be returned and paid for in the progress estimates. To this date no extra work had been returned. I mention this extra work thrown upon me, not as affecting my duty as clerk of works, till July, after which it did, as I shall have occasion to show, but the real difficulty with respect to the foundations arose from the fact, that the foundation plans of the building had no reference to the heating and ventilation, and the heating and ventilating plans had not sufficient regard to the requirements of the buildings. They had not been conceived by one mind, nor had they been blended in any way to give unity to them. Mr. Garth had tracings of the plans of the buildings to work by, but in carrying out his own views, he had gone through the walls, without reference to openings for doors, fireplaces, piers or foundations of any kind ; leaving the architects and me to adopt them as far as possible under existing requirements.

Some of the plans for heating and ventilating were given me about the 1st April, and the rest of the tracings came to me about the 26th. The interlacing of the building plans created much confusion and uncertainty ; the heating and ventilating required other and additional walls, and it doubled at least the work of the architects and myself, and resulted in the difference between the walls as intended and those found on the ground, and this applies alike to all the buildings. I cannot say what the amount of additional work is between the contract and the work actually done. There were compound extras in fact in this way. All Mr. Garth's work was extra, but in working out his plans, there were extras to them from the inequalities in the rock, and rock excavations, and all was additional work from between the supposed foundation lines and the actual foundation lines. I repeat it more explicitly. All the foundations I laid out were the library, kitchen, picture gallery, and rooms adjoining, central court and boiler house, principal entrance hall and main tower, the Legislative Council chamber, and rooms adjoining, the front rooms east of the main tower, and I gave the direction of the outer walls of the east wing, but none of its inner and cross walls, and I laid out the walls under the reading room of the Legislative Assembly.

By reference to the plans it will appear that what I laid out, are not thicker than they ought to be, with a few exceptions, which arose in this way. When a foundation wall was required, and a wall for an air duct, and they approach each other within a foot or fifteen inches, the wall would be made solid ; an instance of this appears in the middle of the front of the east wing, another near the Speaker's entrance to the Legislative Council, and others in places in the angles of the towers, in the north end of the Legislative Council

and Legislative Assembly chambers, also in the main tower, and under the staircases, and staircase to the Library, but I do not know how they were measured. It was easier to make the wall solid than to have built up the separate walls, and faced them. It ought in strictness not to have been allowed as solid, but it is not unusual to allow it as solid to compensate the contractors for other trouble.

I have acted on this principle in England. The walls under the Legislative Assembly are thicker than was intended. Mr. McGreevy asked me to allow him to make them thicker to get rid of the large blocks of stone, which had come from the foundation, and I allowed it on the understanding it was not to be measured as extra. I instructed Mr Grist to measure these walls as if they had been according to contract thickness. All the foundations I laid out are not an inch wrong in the subsequent work. I see on looking at the plan two walls under the Legislative Council chamber leading to the hot air chamber, which I did not put in; they are thicker than necessary, perhaps a foot.

The wall of the boiler house, under the Legislative Council chamber, was built against the blasted rock, and was in some places thicker than others; it was made solid to the rock, and a fair average thickness allowed. The main tower is projected nine feet farther in front of the building than was shown on the original plan. The plan of this as it is, I got in May when the tower was laid out. It improved the external appearance, and the internal arrangements, which would make extras and deductions. It made provision for water and snow getting from the roof. I think as far as I laid the work, there is neither waste nor extravagance about it.

The supervision on this work was not sufficient, there ought to have been two more. I measured the work and certified the progress estimates until I got assistance, and then Mr. Grist and the other assistants did the measurements, and I applied more to the general supervision, but to have done it properly two more would have been necessary; this arose from the increased work caused by heating and ventilating flues, air ducts, openings and arching.

When I applied for assistants, it would be a month or months sometimes before they came. All sorts of influence were brought to bear to get people in. Mr. Hutchison came on the 19th April; Mr. Grist about the middle of June; and Mr. Pelham on the 11th July; and they ought all to have been at the works by the 1st of May. These were all I ever had. Two of the three were efficient, and I should myself have appointed them, if I had known them as I did; the other I might have taken, but I should have arranged their duties differently, but efficient as they were, they were not half enough for the work. I account for the increased size of the buttresses on the Library by an arrangement with Mr. Keefer, and the architects, but all they were to be enlarged was six inches all round, and afterwards a foot in front. These were set out in my absence and I cannot tell why they are too large. I know they are too large. I set out the work on top of the foundations with the assistance of Mr. Jones, architect. I do not know whether it was allowed or not, the foundation walls in the front and sides of the wings are larger than the contract plans show. There was no basement then, but by an order from the Department of the 12th December, 1859, as I understood, basements were to be put in these wings, and windows made. In consequence of this change these foundations are larger.

I do not know why these foundation walls are seven feet, by the alteration they ought to be five feet six inches; I did not lay these out, I gave the general outline only; I suppose the contractor with Mr. Grist did it, but I do not know; I cannot account for it. I did not lay out the end and back walls of the east wing, and I cannot account for their extra size. I think it was necessary to have the foundations of the tower solid; the contract plans only show what the work was to be at the level of the floor; the contract plans do not show the foundation walls or their thickness, they show only the thickness of the wall to be set in the foundation. I never had any foundation plan; I had to infer what the foundations were to be from the walls which were to be set upon them; this only was shewn by the contract plans. The rule in the profession, as I understand, is not so much to furnish foundation plans as to mark with lines the ground plan, so as to show the intended size of the foundation, but I had neither; I do not think it absolutely necessary. The specification describes the footings of the walls as they are to be inferred from the contrac

plan, and to such of them as I made in conformity with it. I think, so long as the ground floor plan shows the foundations as they ought to be there is no rule requiring a foundation plan. With reference to the foundations under the stairs being solid, I think, that if the walls had not been solid there would have been but two well holes of about 2 feet 6 inches by 5 feet, and 2 feet 6 inches by 7 feet; it was easier to build it solid, and gave it more room for the work above. It sometimes happens that it is easier and cheaper for the contractor to build solid work than two walls, in cases where it makes no difference in point of utility, it is usual to allow it to be solid, but in such cases, in strictness the deduction should be made of what was intended to be open. I ordered the foundations under the stairs to be made solid. I thought that as it was to be paved and concrete under the pavement it would have made little difference. The projection from the work under the stairs is for a hydrant. Around the boiler house, in the centre of the principal building the wall is not too thick, it is intended to put the roof on it independent of the wall, that in case of any explosion the roof may not be held by the wall. The solid wall under the staircases in the public hall is built solid, because I thought it was cheaper than to arch it.

The air ducts were made of pick-faced masonry, because Mr. Garth required a smooth wall as part of his scheme, and it was made so accordingly; afterwards, and after a correspondence about it, he admitted that rubble masonry would do if the area were wider, but on the Parliament building all the material had been prepared, but the Departmental buildings are of rubble work outside the buildings; all inside and 30 feet at the outlets the masonry of the air ducts is to be dressed work. As regards the boiler house, I have not considered whether brick would have been better or not, I incline to an opinion against it. It required a solid wall for the wall above; other and rougher masonry might have done, but it would not have accorded with works of this class; they are 3 feet 6 inches on the two sides, besides the filling in to the rock, which would make it six or seven feet. It is a contract wall, with a foot added. The north wall is 3 feet; it was to have been 2 feet; the south wall is 4 feet thick; this was required for the seating of the marble steps which were to lie on it; the wall above is 2 feet 6 inches by the contract. I do not know who ordered the work at the boiler house and air ducts to be of picked masonry; I do not think there ever was a working order; it seemed to be agreed to have it so at a conference between Mr. Keefer, Deputy Commissioner, the architects, and Mr. Garth; I so understood it. On the contract plan there is a small flue in the south-east corner, but Mr. Garth said it was too small, it was made an air flue; and in the north part of the boiler house a large tower was placed to carry off smoke and vitiated air, it is 15 feet square outside; this is extra work, and has been carried up as high as the building. The ordinary fire-places and flues were not done away with on the introduction of Mr. Garth's plan, they are made as the original contract plan required, only changing them where they interfered with his scheme; this made extra work. I do not know why the ordinary chimneys were not dispensed with; I had no orders about them; there are about 200 of them in all the buildings. I knew nothing whatever about the heating and ventilating, or why the other chimneys were made. There are no means of taking out or putting in new boilers for heating the buildings, those now there were built there and so would others have to be in case of being required. The original plan of the Departmental buildings did not contemplate rooms in front in the basement story, but an order was made about the 12th December, 1859, to have rooms made in these basement stories, to light which area walls were required, which were not in the original plan or estimate. Whether it would have been wiser to have raised the buildings higher out of the ground than they are, is a matter upon which I can offer no opinion.

———

6th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

JOHN MORRIS,—Examination continued.

According to the specification the foundation walls were to be built 9 inches larger at least than the walls from the basement; in some cases the architects might order more, but when the foundation is on rock it is not so necessary to give footings to the walls as in earth or clay. The rubble masonry, where it is rubble, is to be of the same class all through, but I still think that even on a rock foundation it is better to have a wider base than the wall above; in no instance, to my knowledge, are my walls in excess of the specification. [Note—When Mr. Morris is questioned in detail respecting certain foundation walls in the east wing, which are in excess of the specification, he denies that he laid them out; he gave, he said, the general line of the building. To prevent the possibility of misunderstanding hereafter, in regard to the detail of the work laid out by him, he now marks all the walls he laid out, by chalking with a black cross, each wall.] I have now marked, on the plan B on linen, with a black cross all the walls which I laid out. In reference again to the library, the inner circular wall is one foot thicker than on the plan; this arose from the number of air flues which Mr. Garth's plan rendered necessary; I can only account for its being made larger by me, by supposing I got a verbal order from the architects. I think the Deputy Commissioner was consulted about this alteration at the general conference about drains, of which I have spoken, some time near the 10th April. I did lay it out so. The buttresses are not as I laid them out, they are I believe in excess of what I laid out. I do not know who made the difference. I do not hold myself responsible for the measurements of the progress estimates, the work was measured by Mr. Grist approximately only; we were overworked and could not do it properly. In the winter it was intended to be gone over, but after we began it was taken out of my hands, and I have had nothing more to do with it. In regard to the walls which Mr. McGreevy requested should be made thicker, I directed that in measuring them, they should be measured as contract walls. I do not know how it was done. In reference to the drains I suggested their direction to Mr. Keefer, he directed their dimensions, and the kind of masonry both outside and inside the building. The air ducts were made according to Mr. Garth's system and plan. Mr. Keefer saw these plans and sanctioned the work in the air ducts and boiler house. I think the errors in laying out the foundations arose possibly from not having figured plans, but a good deal more I think from having the contract plan and Mr. Garth's plan interlacing each other, and from the want of proper assistance and supervision. I had the power given to me verbally by Mr. Keefer, Mr. Garth assenting, to deviate from the plans of Mr. Garth where they interfered with the stability of the building. The external walls generally are laid out correctly; it is in the division walls between the rooms where the errors are. I cannot say it arose from want of figuring. I think when the clerk of works sees any difficulty about laying out the work from the plans, it is his duty to apply to the architect for explanation. I understand the rule of the profession to be that the clerk of works represents the interests of the person for whom the work is being done, that he is to take his orders from the architect and see that the work is properly done, and in the absence of the architects to represent their powers with reference to the works.

In laying out the foundations, the clerk of works co-operates with the foreman of the contractors in laying out the work. I think it is as much the duty of the foreman to see that he is not doing work inconsistent with the contract as it is the duty of the clerk of works, and if work is done erroneously or unnecessarily, the loss should fall on the contractor. I understand the rule also to be that the architect in a complicated building

should check the work, and see that it is not being erroneously done. In regard to these buildings, the plans lay in common in an unlocked room during the day for reference to he contractors, architects and clerks of works. As regards the duty of architects, I think they are not expected to employ any one on the works Their supervision is performed by themselves or their office staff, and their orders may be wholly in writing to the clerk of works, without personal communication; they are expected to supervise the work, and the responsibility at last rests on them that the work is done properly. In England on buildings such as churches, or public edifices not belonging to the government, the practice is to pay so much when certain stages of the work are completed, or when that is not so, the architects gives certificates that work to a certain value has been performed, and on that payments are made to the contractor. In government works, the architects do not measure the work in progress or give progress estimates, the government appoint surveyors independently of the architects whose duty it is to measure and certify, and on their measurement and certificate payments are made.

In this country the practice of the Department of Public Works, bears harder on architects and clerks of works, who are required to measure the work in progress monthly, and to make out and sign progress estimates, on which advances are made to the contractors. These progress estimates are usually approximate estimates, and not conclusive, but they give additional work to the architects and clerks of works.

7th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

Adjournment was made to measure the building for covering for the winter.

8th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

JOHN MORRIS,—Examination continued.

In looking at the contract plans and the sections of the walls showing the footings, I should say that it was intended to have the footing of the walls one foot in height, and by the specification it was to be at least 9 inches wider than the walls; there was no necessity in the rock foundation to carry the footing higher than a foot, any footing on a wall beyond this on a level foundation, I should call superfluous.

In a sloping foundation, the footing might be stepped, but I think it would be at the discretion of the architect to carry out the footing to the level even if it were an extra. None of the plans show that the footing of the walls was to exceed one foot, where no batter is shown the walls above the footing should be of the same thickness as the wall above, and the plans show this to have been intended.

When the wall is battering, the foundation is properly carried up, of the thickness shown by section at the bottom. I know of no reason why a foundation wall on a slope should not be stepped, but if I were an architect, I should properly use my discretion in not stepping it, without any fear of its being called an error in judgment. As clerk of works, if not otherwise directed, I should not think I was doing anything wrong if I did not step the footing. The work I laid out I took from the plans without special directions from the architects. There was scarcely anything done without conference with them I think there was a proper understanding in this respect. I stated that, during the month which intervened between the receiving of the tenders and the execution of the contracts, I was preparing schedules of prices for progress estimates. These schedules were necessary, as I was informed that no schedule of prices had been attached to the tender of Mr McGreevy. I had distributed blank schedules to any one who called for blank tenders as I considered them as part of the tender, and if I had had to do with the acceptance of the tenders, I should not have received a tender without such a schedule; but, on referring to this, Mr. McGreevey informed me that the notice did not require the schedule, and his tender in fact had no schedule of prices. These schedules I did not prepare alone; the architects were with me,—Mr. Fuller for some time, and Mr. Stent all the time. These were prepared in a great hurry, I am not sure but on the same day. Two, or perhaps three tenders, having schedules attached, were lent to us by the secretary from a locked drawer in which they all were; these were the tenders of Mr. Worthington of Toronto, and Messrs. Elliott & Melville, of Hamilton; the other one we took no notice of. We considered these as fair low tenders; and, taking them in round numbers at £112,000, and McGreevey's at £76,000, without the fireproofing, we reduced the prices in detail of their schedules, and made one applicable to Mr. McGreevey's. Mr. Stent had the quantities in detail of one of the Departmental buildings, and with a view to check the correctness of the schedule, we applied them to these quantities, and found that it came within £500 of the contract price on that building. The prices on the Parliament building were applied in the same ratio, as near enough for progress estimates. We were distinctly instructed by the Deputy Commissioner that the schedule was to apply only to the contract work. I think there was no reason then assigned for this. I was present afterwards when Mr. Bernard, the chief clerk in the Attorney General's Office, brought in the draft of the contract. On hearing it read, I observed that no provision was made for extra or additional work; he said no, that in the conditions attached to the specification, these were provided for. I put in now the original specifications and conditions which were in my charge in Quebec, to show any one who was desirous of contracting; they are marked No. 2; it is lithographed, and the one attached to the contract was another copy of the same so far as I know. There was no plan or specification in the Parliament building made for constructing drains beyond certain points all beyond remained as extra or additional. I refer to the plan showing how far these drains went; it is a small original plan marked B; its own number is No. 1. I refer also to the specification for these drains, page 14. The plan from which I made plan H had the heights of Barrack Hill at different points from the sill of the guard lock at the entrance of the Rideau Canal. The height of the rock at the north-west angle of the library is 159 feet 1 inch; near the centre of the principal tower in front, 159 feet 1 inch; the lowest point between them is 154 feet; near the western angle in front, 148 feet 5 inches; the east corner 142 feet; the north-east angle of east wing 150 feet 5 inches; the north-east angle of the Speaker of the Legislative Council's room, 155 feet; the north-west corner of west wing 153 feet; the north-west corner of Speaker's room, Legislative Assembly, 157 feet 5 inches; the south-east point of the library wall 157 feet 7 inches. When I found this plan, during the month which intervened between the receiving of the tenders and the signing of the contracts, I directed the attention of the Deputy Commissioner to the fact that the sites of the buildings were not level, and told him there would be large extras. I had been running the thing over in my mind, and when I spoke to him I showed him that if the level of 159 feet was assumed, there would be increased foundation walls in all the eastern part of the building, and in the south-west part of the west wing; that if the level of 157 were adopted, it would save the wall, but would make a great deal of rock excavation. Having pointed out this to him, he said it would be better to adopt the higher level of 159. This was all before the contract was signed. It seemed

o me strange, that, having the actual levels, these were not given to the architects. I also alled the attention of the Deputy Commissioner to the site of the eastern Departmental uilding; the rock there was nearly level, and the ground lines there were properly shown s level. Then I spoke of the western Departmental building; the slope there is six eet, which is properly shown on the eastern front of that building; the ground line on he southern front slopes 3 feet 7 inches.

The north west angle of the eastern Departmental building is 136 feet. The north ast angle of the western Departmental building is 152 feet 4 inches. On considering these evels, the Deputy Commissioner directed that the western Deptartmental building should e sunk 4 feet, at the north east angle, and that the eastern Departmental building should e raised 3 feet 8 inches out of the ground.

All these levels I have spoken of were the ground surface, not the rock, excepting here the rock cropped out at the west wing of the Parliament building, and the north west corner of the Library. It was presumed that what would be saved in the eastern Departmental building would equal the additional work on the west Departmental building. The Deputy Commissioner had no means then of knowing where the actual surface of the rock was, nor had I. It would have been proper to have caused pits to be dug to ascertain the position of the rock surface. Its position should have been furnished the architects before they made the contract plans, or time given to the architects to ascertain it. From the month of July, 1860, my time was chiefly occupied with work done for the Department, so that I had little time to attend to the buildings. I went occasionally round the works.

Mr. Grist acted as clerk of works on the Parliament building; Hutchison on the eastern Departmental building, and Pelham on the western Departmental building. From the 21st December, 1859, I had charge of the Barrack Hill, and all the buildings there, also Major's Hill with the ground attached. The care of these occupied a portion of my time. On the 9th September, 1859, I was requested to inquire into the character of the materials available in the vicinity of Ottawa for the public buildings. After making some examination, I reported my views on the 4th October.

The buildings had not commenced when, on the 15th February, 1860, I received the letter, No. 30934, requesting me to state my views, first as to the quality of the Nepean and Templeton stone, its effect and durability as compared with the Templeton, and secondly my opinion as to the difference of cost. On the 22nd February, I reported.

My report is published in the Blue Book, page 259. I have no knowledge of the change from limestone to the Nepean stone. I believe the Nepean stone is far more durable than the limestone, and desirable in case of fire, and the colour is more agreeable.

I thought 21 cents a foot in the face of the wall would be the difference of cost, but I afterwards found it was not enough. The quarry from which the first came, and upon which my estimate was based, belonged to Augustus Keefer, Mr. Bishop, and Mr. Wilson. These parties got into difficulty, and the working of the quarry was stopped. Afterwards the contractors opened quarries of their own, about two miles and a quarter further distant from the city. The stone is as good from the one as the other, but the bed of the latter quarry is not so good, and requires more dressing than the other.

The Brockville stone used in the building was used at the instance of the contractor, who was at liberty to use it if he pleased, subject to the approbation of the architects, by the terms of the specification. The Brockville stone was disused because it could not be supplied in sufficient quantities, and some of it was defective The difference of cost between the limestone, as contemplated by the contract, and the work as done, is 19 cents a foot as in the wall, or 21 cents cubic; I estimate the wall to be 10 inches in the facing. I think it is double the work to prepare Nepean stone to limestone. The Nepean stone in the quarry was $1.25 a toise of 216 feet; the block stone the same as in Gloucester; my estimates are not made from actual test, but as my opinion.

9th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU,

JOHN MORRIS.—Examination continued.

While I was employed at the University buildings, Toronto, about the middle of August, 1859, Mr. Rubidge called on me and asked me to go and see Mr. Keefer, the Deputy Commissioner, who was then in the old Parliament building at Toronto. I went down and met Mr. Keefer; he said he would have but little time to examine the competing designs, and asked me to cube three of them. I had three or four hours a day to spare, and I ascertained the cubic contents of the three designs.

These were the design of the Parliament buildings by Messrs. Fuller & Jones, the designs by Stent & Laver, and that of Cumberland & Storm. By my returns the cubic contents of the first were 3,600,000 cubic feet, the next 3,000,000, the last ,500,000. This was the mode by which I understood Mr. Keefer was going to determine th ir relative cost. From my knowledge of the University building, with which I was well acquainted, its design being similar, I estimated the cost of the first I examined at £150,000; the next I do not remember estimating; but the last at about £130,000 or £135,000. These estimates I stated to Mr. Keefer, who said he thought I must be mistaken, for there was a tender in to do the first at £75,000, the sum appropriated. That of Stent & Laver was about two thirds of the size of the other, and would have cost in proportion, for the style was similar. I formed my opinion of the value of the buildings in the estimate I then made, partly from my experience here and works in England. In the report I made about materials on the 4th October, 1859, I suggested the difficulty of getting bricks sufficient; and, to prevent the contractors from being at the mercy of brickmakers, I recommended that Ordnance lands unleased should be allowed them to make brick; and this order was given. So far as Mr. Garth's plan showed the system of heating and ventilating, the air ducts were to be brick. I do not know of any particular order in reference to the change from brick to stone for these ducts, but I understood from the architects that they were to be stone, and I directed the contractors to make them of the class of masonry they now are. Mr. Keefer was here in April before they were begun, and I understood he then approved of the change; he certainly never objected to them at any subsequent visit. I examined the system of heating and ventilating which the contract plans showed in all the buildings, and I considered them amply sufficient, except in the Legislative Council Chamber, and Legislative Assembly Chamber, and very little alteration would have remedied any defect in these chambers. I suggested to the Deputy Commissioner that the mode of heating the buildings should be definitely settled before the contracts were signed. He said he did not think it would alter the buildings, and it would cause delay in waiting to do it. Before the advertisement was issued calling for tenders for heating and ventilating (copy in Blue Book, page 23), I was sent for by Mr. Keefer to ask my opinion as to whether the advertisement was sufficient. I found it provided only for heating, and I suggested the clause now found in it requiring specifications and detailed drawings.

I think the ground lines adopted were the best that could be under all circumstances. I remember Mr. Garth saying when he saw the stones prepared for the ducts, that he wished the surface smooth, and the joints close; he even suggested pointing the cold air ducts. I never received any definite instructions from the architects or any one else as to my duties on these works, or instructions of any kind, until a change was made in the month of June, 1861, when my duties were limited to part of the Parliament building. The architects were on the building every day, often twice a day, when they were in the city. Sometimes they might be absent a day or more. Messrs. Stent & Laver lived in town from the commencement of the works. Messrs. Fuller & Jones lived in Toronto at

the commencement of the works, but came here early in the spring of 1860. Before they came to live here, their visits were but occasional, but after they came, they were on the buildings as much as architects usually are who have practice elsewhere. The duty of architects on buildings like these is very much in their own discretion, but they certainly ought to have seen that no mistakes were made in laying out the foundations, and that the general character and quality of the work were such as they ought to be. Their authority is supreme on the buildings, and their responsibility is equal to their power. I took the measurements of all the excavation, including rock for foundations, drains, and air ducts, from the commencement till June, 1860. They were put in a book by me, which Mr. Grist got from me. I heard afterwards it had been lost. The depths and widths were accurately taken, but he could not in the rapid progress of the work very well distinguish between contract work and extra work. It was intended to make these calculations in the winter when we had time. For this purpose, I desired the other clerks of works to make sections and plans, and take the measurements carefully. The progress estimates were made out from these. I was not directed by any one to prepare these plans; I did it because I wished to keep a check upon the measurements. The architects did not measure the work for the progress estimates. I made the measurements until I had assistant clerks of works; then they made them, and I sometimes assisted them in making out the bill of quantities from their measurements.

I do not remember that the architects ever made any remarks while the foundations were in progress, whether they were properly or improperly built. The assistant clerks of works were to get their instructions from me. I gave them no written instructions. I directed them to attend chiefly to the quality of the work, and instructed them to make plans of the depths of their measurements. They were not taken off to my knowledge to any other work than the superintendence of the buildings, and the plans I have spoken of. I did not get these clerks of works when I asked for them; and, when they did come, it took them some time to get acquainted with the plans. I cannot tell why plans, the cost of which was so far in excess of the appropriation, were adopted. When I first examined the plans of Mr. Garth for heating and ventilating, I saw that the preparation merely for the system of heating and ventilating would create an enormous cost, and I told Mr. Keefer this. I subsequently told the Deputy Commissioner that the air ducts would cost £60,000.

On the 15th January, 1861, I was requested in writing by Mr. Page to make memoranda and suggestions connected with the buildings, and with works directly or indirectly connected therewith, including bells and speaking tubes, gas and water service, floors, fire-proof roofs, marbles, main drains, and sewers, additional foundation walls, drain to east wing of Parliament building, woods, and brief description of progress. These, with pointing out the buildings, occupied me in the winter, during which I had intended to check the measurements of the works then done. I would here remark that I called the attention of Mr. Rose, the Chief Commissioner, to the cost of the ventilation when he came up. By the specification attached to the contract, provision was made for chases to be left for all soil or other pipes. No plan of these was ever given, although in my report, before any walls were built, this was urged upon the Department. The consequence will be, that great extra expense will be incurred in making these chases for water pipes, bell pipes, speaking tubes, whenever they are put in the building; and the cutting required for them will damage and mar the walls.

11th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

JOHN MORRIS,—Examination continued.

There were no tests applied to try the durability of the stone originally contemplated, nor the stone actually used. There was an advertisement for samples of stone, and many were sent in, but no specific examination made. From an examination of the rock at Gloucester, and from the texture of the stone in Nepean, I was satisfied of their durability. I never had any difficulty with contractors themselves, but I have had with the foremen. I never ordered or set out walls thicker than the plan warranted. I found them built thicker afterwards, when they came to be uncovered after the winter, and I was astonished to see them so; I cannot account for their being so thick; my impression is that the walls were set out by the foreman and not checked, but I was not present and cannot say. The order for making the foundation to the rock was from the architects, countersigned by me, dated 14th February, 1860. There were times when the contractors did not get constructive drawings and detailed drawings generally; there was a complaint from the contractors of the Departmental Buildings, in writing, to me; I sent it to Messrs. Stent & Laver; I do not recollect that Mr. McGreevy complained much; the other contractors did complain; whether they had cause or not I do not know; I think they had reasons, for I remember the centre part of the eastern Departmental Building being one foot above the sills of the lower windows until the sides were 15 feet or more higher. As the main tower in the Parliament Building was originally planned, there were two sets of doors in the entrance hall, with expensive carvings and finishings; as it now is, there is but one door; this is what I spoke of as a deduction from the extras which the change otherwise caused. In the specification of the Departmental Buildings reference is made to a sample wall. (Blue Book, page 101). I understood a sample wall had been built, but when I came it was down; I caused a sample wall to be built in the spring of 1860; it was what I required as a compliance with the specification; the contractors neither admitted nor protested against its being a specimen wall, but the first parts of the walls were built according to it; the upper parts of the walls are not so good. I think the cross bonding of the walls is good, so far as I had charge of them; the iron bonding was put in so long as I had to do with the front walls, but was afterwards discontinued; I do not know why. On the 28th May, 1861, I received a letter from the Deputy Commissioner, which I put in, (No. 3), and on the 1st June, 1861, a letter from the architects (No. 4); accompanying this letter was a tracing marked (C), showing that my services were to be confined to the library and to that part of the building set apart for the Legislative Council and Legislative Assembly. From the early part of July, 1860, I was engaged in making preparations for his Royal Highness the Prince of Wales to lay the foundation stone, and I could not look after the buildings any more that season. Nearly all the west wing was set out in September, while I was away. I generally had to ask for instructions from the architects; after this I superintended the building of the outer wall of the library; I discontinued my services in October, 1861. Last fall about seventy feet of the cornice fell, for want of cramps, and was injured; I spoke to Mr. Larose and told him it was for want of cramps. He said he did not know he had power to order them. I said he had. Cramps were put in, but the cornice is now imperfect from the breaking. There is a part of the western Departmental Building with the cornice imperfect. I know that Messrs. Stent & Laver were lime merchants, and supplied the contractors for the Departmental Buildings, along with other lime dealers, with lime for these buildings. It is usual both in England and this Province to attach to tenders and contracts schedules of prices; these schedules ought to represent, and usually do repre-

sent, the prices at which the contract has been taken, and are intended to be used in estimating deductions as well as extra work; they are not used for the purpose of progress estimates only, for they had their origin where progress estimates are not known. They are not safe for progress estimates without testing their application, for the amount of the contract might be drawn while the work was in progress, if they were used without such test. In making out the schedule to attach to Mr. McGreevy's contract, there were no tests used to ascertain the correctness of the schedules.

During the progress of the work Mr. Rose, the Chief Commissioner, visited the works three times. The first was when the first sod was turned in December, 1859; the next early in July, 1860; and again with the Prince. Mr. Keefer seven or eight times: First, when the sod was turned; again in April, 1860; October, 1860; also in May, 1861. He examined the works at these visits. Mr. Rubidge was with Mr. Keefer in May, 1861. I do not remember any other visits than these. I received from the Department of Public Works, a letter on the 13th December, 1859, 11th April, 1860, 17th April, 1860, 16th May, 1861. The first time I was absent was on leave, after the Prince was here, and Mr. Pelham and Hutchison on the Departmental buildings, and Mr. Grist on the Parliament building did my duty. The contractors were stopped a few minutes every hour in blasting; perhaps 100 or 150 men were stopped. This occurred during the first year. I know the brick walls were not built simultaneously with the stone walls, but I do not know why; they were not under my charge. In the winter of 1860-61, a large quantity of brick was brought to the ground, which I had assorted, the soft by themselves, which were rejected. There were about 200,000. I do not know the precise quantity. They were to have been taken off the ground in the spring. I believe, however, they were used in the building afterwards. At a later time, in the fall of 1861, I saw brick of a very bad quality being built. They were not to be used where I was, but I objected to them to Mr. McGreevy, and told him they were of a class of brick which were not taken the year before. He replied if such brick were insisted on, it would take ten years to finish the buildings. The walls which are found overhanging the basement walls arose from the foundations being wrong. The surplus wall is useless. The enlarged plan, to be used for the first story, did not correspond with the foundations, and were made as I believe to suit them as far as possible, but they are neither in fact exactly the contract plan.

If the bricks had been according to the specification, a few might have given way, but not the great quantity which have, and which were not sound when put in. With reference to the duties charged upon me by the letter of the 28th May, 1861, wherein I was told my duties would be confined to practical supervision, I say it was utterly impossible for me to see that none but the best class of material was used, and the work throughout well executed, to make measurements of all work performed, and keep time of men employed upon the works, both contract and extra, and such other memoranda in relation thereto as the architects may deem necessary and expedient, when in fact Mr. McGreevy had, for the sole purpose of keeping time, two men constantly employed on the Parliament building.

The measurements of the works grew upon me; at first little was required; as the works increased, I still measured for the progress estimates. I did not know whether the architects were of right to do it, but they never did do it, and when it was required of them, they alleged that they were not to do it, and the best proof of it was, that they never yet had done so. I never received over $1200, but on the 19th August, 1861, Mr. Larose received $1400, although he never did one fifth of the work. Messrs. Bowes, Pattison and Hutchinson had $1200, and Mr. Pelham $1000.

On the plan marked D I have drawn a black line around those portions of the building, the foundation of which I set out. I set out the footings of the walls except those walls from 1 to 9 inclusive. I did not set them out. A plan showing the levels of the ground, which I saw in the office of the Department, is not here, but I speak from a tracing of it. The water closets at each end of the public hall are removed one room more to the east and west, and one substituted for the other. The large ones only are there. In the buttresses I directed the space between the rock and foundation made of masonry up to the level of the rock; the work from that to a given point at the ground line I did not

order. I laid out the work as it is above the ground line. The piers under the members' lobbies were changed from 6 small to 3 large ones. I understood the three large were to be built instead of six small, as a compromise, for which there was to be no extra. There would have been double as many quoins; there is more material but less labour, and I should as soon build the one as the other. I have never in any instance, where I have made an alteration, been told by the architects or any one else that I was wrong.

12th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD. VICTOR BOURGEAU.

JOHN MORRIS,—Examination continued.

The dotted line outside the colouring around the library, shows the footings of the wall, as I set them out in the rock, to the surface of the rock. I directed them to be built; but they had been erroneously built of the thickness shown by that dotted line from the surface of the rock to the ground line, without authority or my knowledge.

Before the tenders were received, I informed the Deputy Commissioner hat my estimate of the value of the Parliament buildings was $492,000, without fireproofing. At the time the Prince was here I applied verbally to Mr. Keefer, for assistance on the works, for a person at a moderate salary, who could make measurements of what was going on, and look after the minor details, while the clerks of works were otherwise employed. This application I repeated, but was at last refused. I was never absent from the works except on leave, and illness from over work.

(Signed,) JOHN MORRIS.

THOMAS FULLER sworn:—

I am an architect by profession, and have been in practice about seventeen years. I have been in this Province since 1857. My first knowledge of the Parliament Buildings was derived from a notice to architects, from the Department of Public Works, dated the 7th May, 1859. From seeing that notice I with my partner, Mr. Jones, determined to compete for the designs. I, with him, put in two designs, one of which, with some modification, is the one upon which the Parliament Buildings have been erected. After we had put in our designs, the first communication we had was a letter of the 3rd December, 1859, from the Assistant Secretary of the Province, telling us that our plans were not considered by the Government to be perfectly adapted to the purposes for which they were intended, and would not be adopted unless they could be altered so as to be made satisfactory to the Government.

We were told that should we desire to alter the plans, so as to make them meet the requirements of the Government, it would be necessary for us to repair to Quebec at our earliest convenience, to confer with the Department of Public Works there on the subject. On the receipt of this we went to Quebec. On our arrival there we were informed by the Secretary of the Department of Public Works, that a letter had been sent us from that Department, of the 6th September, with a copy of the Order in Council, approved of by His Excellency the Governor General on the 29th August, 1859.

These we did not get till our return, but we were informed of their contents while in Quebec.

We arrived at Quebec on the 5th day of September, and I attended on the Deputy Commissioner, Mr. Keefer, and in consultation with him was shown the Order in Council of the 2nd September. (See Blue Book, page 18.) After several consultations during three days, we received the letter of instructions of the 9th September, from the Deputy Commissioner. (Blue Book, page 20.) I remonstrated with Mr. Keefer about the shortness of the time between then and the 15th October, to do all the work mentioned in the letter, but he urged the necessity of letting the work that year, and I was induced to undertake to do it the best way I could during the given time.

The competition designs had no detailed specifications; there was a general description of the building, and of the mode in which the work was to be done in general terms, not going into detail at all.

During the time we were in Quebec on that occasion, Mr. Keefer entered into terms with us as to our remuneration for our services; we were to have 5 per cent. on the outlay; we were not to make any charge for extras occasioned by omissions in our plan and specification. We were to furnish one set of plans and specifications to be kept at Quebec and one set at Toronto. Mr. Keefer thinking it advisable that another set should be at Ottawa, it was agreed we should be paid in addition for those. The specifications, after approval, were to be printed but not to be sold. I wished to be allowed to supply quantities, as is the custom in England, and everywhere, as I suppose; but he said the Department did not allow it, and if we did so, we must do it at our own risk. The rule in the profession is, for the architect, if he pleases, to make out the quantities of the work for parties tendering, who pay for them to the architects.

In reference to our remuneration, we wrote to the Deputy Commissioner on the 17th November, 1859. (See copy of letter in Instructions to Architects.) On the back of this is an endorsement by the Deputy Commissioner, to the Commissioner, for which see this also.

We wrote to the Commissioner on the 19th November, 1859, on the same subject (See letter of that date.) It was intended the charges should be those usually paid to architects.

By Mr. Keefer's wish we returned to Toronto by way of Ottawa, to see the site of the buildings, and to make any enquiries we thought necessary; we did so, and got back to Toronto on the 10th September. From that time till the 11th October we worked on the plans.

We had been directed, by the instructions of the 9th September, to put in five boilers in the area without the main walls, but on the 20th September I wrote to Mr. Keefer to say, that on conferring with the parties who constructed the heating apparatus in the Toronto University, we thought two boilers in the central court better than five, and to have fans to drive the heated air in winter and the cold air in summer through the building; and to answer us by telegraph. He answered by telegraph, on the 22nd, that our plan for heating by two boilers was approved.

I found it impossible to get our plan completed, showing the heating. Mr. Keefer had telegraphed us, from Ottawa, on the 7th October, that he would be in Toronto on Monday evening, and to get the specifications translated into French, and have copies ready to send to Quebec. It would have been impossible to have prepared the plans in time, shewing the system of heating and ventilating, and, as far as my experience extends, it was a responsibility not usually thrown upon architects on buildings of this extent.

On the 11th October, at Toronto, after several consultations, the plan of heating was left out of the plans and specifications intended for the use of parties wishing to tender for the work. Heating is in itself a separate branch of construction, and I know of no public building in England which has not been done by persons professing that branch of business, under the superintendence of the architects. The plans provided ventilating flues from ventilating shafts, the ordinary fire places, and two large flues for the use of boilers.

If the heating and ventilating had been put in the plans and specifications, it would have been impossible for parties wishing to contract, to have been able to do so in the time allowed them, unless bills of quantities had been made out, for which there was no time and no authority.

In constructing buildings of this kind, the Department of Works would have to rely on the estimate of the architect, that the work could be done for a given sum.

With a list of prices and the quantities of work, the Department could estimate the cost of the buildings.

When the plans and specifications were finished, they were as perfect as plans usually are, and would enable contractors to estimate their quantities fairly. We had nothing to do with preparing the form of tenders for the work; they were sent us from the Department. It is not an unvarying practice to have schedules of prices with the tender. In this case it was intended that schedules of prices for work should accompany the tenders, but the notice to contractors and the form of tender have no reference to schedules of prices to accompany the tenders. I know that blank tenders and blank schedules of prices were delivered at Ottawa and Toronto to any person wishing them. I do not know what was done at Quebec.

If a schedule is attached to a contract, it should have reference to the price at which the contract is taken, but if the contract be too low, that schedule ought not to be applied to extra work, unless by its heading it applies to extra work.

I should think a builder foolish who signed a contract so applying it, and an employer equally unwise who accepted a tender below the value of the work.

There was no schedule with Mr. McGreevy's tender, but there was one made between the time of opening the tender, and the signing of the contract. The contract has a schedule of prices attached to it.

Before the contract with Mr. McGreevy was signed, he had put in a schedule of prices, which on examination were palpably in excess of the contract. On seeing this, I suggested to Mr. Keefer, that a great deal of difficulty might be obviated, by making payments at given stages in the progress of the work. He said this was not the usual mode of doing business in the Department. He then requested Mr. Stent, Mr. Morris, and myself to make a schedule of prices for Mr. McGreevy's contract.

At our first meeting we all agreed that the work was taken at from 30 to 40 per cent below its value. I suggested, I think, and the rest agreed, that we should make a schedule at fair rates, and from it deduct from 30 to 40 per cent. I left Quebec before the schedule was finished, but I understood when I left that they were to be made on that basis.

A day or two after the tenders were given in, at his request, I gave Mr. Keefer an estimate of my valuation of the work on the Parliament building; it was $492,000. It was known to Mr. Keefer I think, and all the architects knew that Mr. McGreevy could not perform the contract at his price, but at a loss.

When I first made the competition designs I did not estimate strictly their value, but when I afterwards did it, I found their cost exceeded the appropriation.

I think this the only style of building which is really adapted to this climate. It admits any thickness of wall, any quantity of light, has steep roofs well adapted to prevent the accumulation of snow on them. The steepness of the roof has the effect of throwing the rain from the walls. Eaves troughs are not provided for nor are they advisable, where their exposure is great, and there are heavy storms. When I came to Ottawa on the 8th September, I discovered that the ground for the buildings was not level, but as the particular site had not been determined upon, I was unable to show it on the plans. As the fairest way I could imagine, I assumed the ground lines to be level. I called Mr. Keefer's attention to this on the 11th October, and he agreed it was the fairest way to assume the foundation at two feet under the ground line on the plan.

I think the site of the building should have been determined before the contract plans were drawn. Where there was any doubt as to the nature of the foundation, test pits ought to be sunk, but here it was assumed that the rock was within two feet of the

surface. We knew the ground to be uneven, and there was no possible way of placing the building so as to stand on even ground. There was no examination made to my knowledge to ascertain the nature and character of the foundation, before the contracts were let. The plans we made for the contract were lessened and modified as we were instructed, excepting as to the heating and ventilating, and these were omitted under the contract, and for the reasons I have stated. I have not had schedules of prices attached to any works under me, before this instance, in this country.

I have had them in England, though not usually. I understood it was the practice of the Department of Public Works to have them, and I believe there were schedules of prices attached to the contracts for the Toronto University. It is more Norman in its style than this, which is Gothic.

On the face of the schedule of prices attached to Mr. McGreevy's contract, they were applicable to extra work as well as contract work, but I was informed by Mr. Keefer that it was a mistake. Mr. McGreevy had protested against it when he signed the contract, and I was instructed by Mr. Keefer not to regard the schedule as applicable to extra or additional work.

I apply the term extra, as applicable to work done, which has been erroneously omitted to be specified, and the term additional to work done beyond the work shown, or intended to be specified. In this instance the additional work, is that required to be done under the assumed foundation line shown on the plan. We received a letter from the Department of Public Works, dated 23rd March, 1860, requesting us to transmit a schedule of the prices upon which the extra work on the Parliament Buildings should in our opinion be returned and paid for in the progress estimates. From this I inferred that the Commissioner did not intend to hold the schedule attached to Mr. McGreevy's contract, as binding on him. On the 30th March, 1860, we returned three prices for extra work, namely: Excavation in rock, not exceeding 5 feet in depth, $1.25 per cubic yard; the same below 5 feet in depth, $1.90 ; Masonry, in foundations and backing, $8.00 per toise of 54 feet ; and we informed the Commissioner that it was impossible to fix, with any degree of accuracy, a complete schedule of prices, until the works were further advanced. These prices were acted upon, I think, till Mr. Page came on the 8th February, 1861, when the price, $1.90 per yard of rock excavation was limited to the second 5 feet, and $2.25 fixed as the rate for the third 5 feet. At these prices the rock excavation was returned, till Mr. Killaly's measurement of the works after they were suspended in October, 1861.

We made no other schedule as the work progressed, but our progress estimates showed, from month to month, the extra works, and the prices we attached to them. The progress estimates signed by us, and returned to the Department, are the progress estimates of work of all kinds done on the buildings. Those I look at now, marked No. 5, I have no doubt are copies of them. Before Mr. Keefer left Toronto, after instructing us about the plans and specifications, I understood he intended to advertise for the heating and ventilating of the buildings, and I saw about the 18th of November, a notice from the Department of Public Works, dated 14th November, for Tenders until the 30th December, for heating the Parliament Buildings at Ottawa ; reference was made to us for plans of the building. These plans lay open for the inspection of any one who chose to refer to them.

On the 16th January, 1860, I had a telegram from Mr. Keefer, saying I was required at Quebec, to advise on the heating and ventilating, and to come down at once. I left for Quebec that night and arrived on the 18th, and on the 19th I was examining the plans for heating and ventilating with the Deputy Commissioner. The plans I allude to are those of Mills, Stocklin & Co. , Mitchell's, Garth's four systems, and Bartly and Gilberts'. After examining them thoroughly, I made a report in writing to the Commissioner on the 21st January, 1860, called in the blue book, 23rd January. The report is printed in the blue book, beginning at page 138.

On the 23rd January, Mr. Keefer made a report to the Commissioner, who was then ill at his house, but we went there and submitted them, and he appeared to approve of them. I stated to Mr. Keefer that I thought it would be wise for the architects and himself, or some other competent persons, to go to Washington and Philadelphia, where a similar

system was in operation, and see and inspect the work. I understood afterwards, the Commissioner had made it a *sine qua non* with Mr. Garth, that he should go himself and see these works.

I left Quebec on the 24th January. On the 2nd February, 1860, I had a telegram at Toronto, from Mr. Keefer, to say "Mr. Garth has been referred to you at Ottawa, to arrange the plan of heating,—is there now." On the 3rd February I left Toronto for Ottawa, and arrived there on the fourth. I found Mr. Garth there, and I learned from my partner that a letter from the Department of Public Works, had been addressed to us at Ottawa: (see letter 28th January, 1860.) Mr. Garth's plans were to be matured under our directions, specifications were to be prepared, and everything arranged between us and the contractor, subject to the approval of the Commissioner, in order that a contract could be entered into with the Department, which should embrace the whole system of warming and ventilation, in as complete a manner as it was possible for us to devise, and that the plans and specifications should not add anything to the amount of the tender, which was $61,285.

On the 6th, 7th and 8th February, I was engaged with Mr. Garth in Ottawa. I made memoranda on his plan, to guide him in making his contract plans. On all these days Mr. Morris, the clerk of works, was called in, whenever we required him, to consult or advise about them, and on the 9th I and my partner made a report to the Commissioner on the subject; it is published in the blue book, page 162. On the 14th February, we wrote a letter to the contractor, which we sent for the approval of the Commissioner of Public Works; it was countersigned by John Morris, approved by the Commissioner, and delivered to the contractor on the 27th February, 1860.

This is the order referred to by Mr. Morris:

"We request you to excavate the ground for the various foundations, down to the surface of the rock, and also the whole area of the central court, and all the trenches requisite for the cold air ducts in connection with the warming apparatus, and leave openings for doors in the basement walls of the rooms in the front part of the building, so as to give access, and fit them for future use should they be required, giving them light also from without, and fire-places within, as shown on the working drawing."

I heard no more of this matter till the 5th April, and I then received at Toronto a telegram from Mr. Keefer, saying: "Mr. Garth having completed his plans, I have appointed to meet you and him at Ottawa on Tuesday next." I arrived at Ottawa on the 10th. On the 11th I was with Mr. Keefer, examining Mr. Garth's plans. Mr. Keefer on consultation made some slight modifications. I was with Mr. Garth on the 12th, going over the plans. Mr. Garth left us tracings sufficient to guide us, and went away to perfect two contract plans.

Before these excavations and works for the heating and ventilating were ordered, I made no detailed estimate of their cost, but I told the Deputy Commissioner they would cost £30,000 for the Parliament Buildings; and I heard Mr. Morris tell him in my presence, about the 11th April, it would cost that sum for the excavation and masonry, exclusive of Garth's contract I never was asked to make any estimate of the cost.

13th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN.

JOSEPH SHEARD, VICTOR BOURGEAU.

THOMAS FULLER,—Examination continued.

The first time I informed Mr. Rose of the expense of the heating and ventilating was about the 8th of June, in presence of Mr. Stent. I told him they would cost in the Parliament Buildings at least £30,000, and Mr. Stent told him that in the Departmental Buildings it would cost about the same. We told him this on our application to have the order in Council revoked, and a new one made in regard to our per centage, on the basis of the agreement with the Deputy Commissioner.

We insisted that these works had been undertaken since the order in Council, and we ought to be remunerated for the superintendence of so great an undertaking. We said, besides, the order had never been assented to by us, and if he left office we should be in a false position regarding it. He said it was not a good time to move in it, and we need not be afraid, for he should at all events be in the House, and he would state that he considered we had protested against that order in Council. (See letters 11th July and 22nd August, 1861.)

Although the order to the contractor dated the 14th February, and delivered to him on the 27th, does not allude to rock excavations, I say that the excavations therein mentioned, after the first sentence, were rock excavations, and were so understood by the contractor and every one connected with the works; and it was upon that order, that all the excavations of air ducts, boiler house, and everything connected with heating and ventilating, and also the drains under the air ducts, were executed.

There was no other written order ever given respecting these works. We made no cross sections or measurements of these rock excavations; the measurements and sections were made by the Clerk of Works, and were entered in a book which was kept in my office. This book was there when Mr. Page was here making his report, but I missed it on the 7th March, 1861, and I have never been able to find it since. It must have been taken away by some person, but I could never discover who took it. From that book the progress estimates were made up, and from it Mr. Page got his measurements. I never checked the measurements. Mr. Morris and Mr. Grist were the only persons who made the measurements. Mr. Morris had the charge of the excavations and measurements. Mr. Grist was under him, and his assistant.

When Mr. Keefer was at Ottawa, on the 11th April, with Mr. Garth, it was then determined how the ducts should be terminated. The whole matter of conducting the air to the Parliament building was discussed between Mr. Keefer, Mr. Garth, Mr. Morris and myself. My first idea was that the external air could have been brought from the courts; the next was that the air might be supplied from a number of small ornamented shafts about the grounds; but it was conceded that the distance from the bank, which the cold air would have to come in winter before it reached the steampipes, would modify its temperature, and in summer the same modification of temperature would occur. And so, on a full consideration of the subject, it was determined to terminate at the bank. From our instructions we conceived it was our duty to adopt the best mode without reference to economy, and the one adopted was the best. I think Mr. Garth told me, that before he tendered, Mr. Keefer had given him permission to sink the boiler house ten or eleven feet, and it was sunk to the depth he wished. We had to make a sewer in the rock from the boiler house to drain it, but the part above the sewer was used as an air duct.

I concurred in Mr. Garth's reasons for lowering the boiler house. We had a tracing of Mr. Garth's system for our guidance, but we did not get his perfected plans till about the 25th August. They were sent to us by express, and the letter from the Department of Public Works, advertising us of their being sent, is dated the 23rd August, 1860, No. 33598—subject No. 1026. By a letter of the 24th August we had a list of the plans, 23 in number. On the 17th September we were requested to return the plans, in order that the contract with Mr. Garth might be completed, and during the week we returned them. About the 18th October, we received a letter, dated the 16th October, No. 34,123 requesting us to arrange a meeting at the Department of Public Works, in conjunction with the architects of the Departmental Buildings and the contractor for heating and ventilating, for the purpose of agreeing upon and drawing up a specification for the contract for heating and ventilating, in accordance with the plans agreed on, and the tender, and conditions of the Order in Council.

We were farther told that the specification was necessary to enable the Department to have the contract signed, and that no money could be paid till it was signed.

I left for Quebec on the 27th, but being delayed by fog, I was too late, and the contemplated meeting was not effected.

A meeting on the subject took place in Ottawa about the 6th day of November, 1860. Mr. Keefer, Mr. Garth, and myself were present. Mr. Garth's specification was discussed, and approved. On the 16th, we had copies of the specification sent us, and were requested, conjointly with the architects of the Departmental Buildings, to make an estimate of the work done by Mr. Garth, in this contract, up to the 1st January. In this letter we were informed that Mr. Garth signed his contract on the 12th January, 1861.

Before Mr. Keefer came on the 11th April, 1860, we had determined not to use brick for the air ducts, and on discussing the question with him, on that occasion, it was understood they should be of masonry.

There was no written order to execute the masonry in the air ducts, nor do I recollect any specific verbal order, but it was understood it was to be done as the work is done.

There were a few feet of Bouchard dressed ashlar begun, but I considered it too good, and pick faced ashlar was substituted, as now found in the work.

Mr. Morris carried out the work, as he understood our order. The price of this work was returned at first at 41 cents per foot superficial, measured on the face for the stone, and dressing; the masonry, at $8.00 per toise of 54 feet.

There was no specific order, written or verbal, for the boiler house, but I agreed with Mr. Morris it should be pick faced limestone, as it is. The price of stone in the boiler house was 90 cents per superficial foot for stone, and dressing; at $8.00 a toise, of 54 feet for masonry.

All this work was discussed with Mr. Morris and Mr. Keefer, and approved, and the prices fixed. I know that the cost of the works connected with the heating and ventilating, on the Parliament Building alone, unconnected with Mr. Garth's contract, up to the first day of February, 1861, amounted to $136,000, to which there ought to be added about $20,000 at a rough estimate, of the increased sewerage; and there has been expended since that time about $44,710.63 on these heating and ventilating works. Of this amount $20,168.68 was paid to Garth on his contract.

On the 6th February, 1861, I had a conversation with Mr. Page on the subject of the class of masonry in these ducts. He told me his attention had been directed to it, and a very considerable saving could be effected by the use of ordinary rubble masonry. On this, I telegraphed to Mr. Garth to know if the sides and arches of cold ducts would do to be built of ordinary rubble masonry. His reply was, "if well and smoothly built they will answer."

On the 13th February, 1861, we received a letter from Mr. Page requesting us to use rubble masonry in certain parts of the work. (See letter in blue book, page 244.) See our letter of the 16th February, and contractor's letter of the 15th, to which I refer. My own conviction is that rubble masonry is not adapted for the work.

To be fitted for the purpose, rubble masonry must be smoothly pointed; but the action of the air would be constantly disintegrating the mortar, which would produce a continual supply of impalpable dust, which would be drawn into the rooms at all times while the system was in operation.

At the meeting with Mr. Keefer on the 11th April, it was understood that the construction of these air ducts, and walls, and vitiated air flues, and ventaducts, should be under the supervision of a person specially appointed, but no such person was ever sent. So far as I am capable of judging, this system of heating and ventilating is the best which could be conceived. I have considered the subject, and believe I am capable of forming a correct opinion upon it.

The rock excavations were made under our orders. There was one part only upon which there was a doubt. My first impression was, that it was not necessary, but I think it was properly removed under the circumstances. It was that part under the west wing, and under the Legislative Assembly rooms. Mr. Keefer agreed with us in this opinion. I know of no unnecessary excavation of rock. The position of the buildings, and their foundation lines, were approved of by the Deputy Commissioner, and afterwards by the Commissioner; and by a letter dated 1st February, 1860, from the department, we were informed that the block plan showing the sites of the Parliamentary and the Departmental buildings, and their respective levels, was submitted to, and approved of by the Executive Council, and that we were to arrange the levels of the buildings as thereupon represented. The clerk of works, Mr Morris, had been notified to the effect, that we were to have free use of the drawing which was in his possession. In accordance with this, the ground levels and sites were fixed as they now are by us. We staked out the building in December, 1859, but we laid out no foundations. This we left to the Clerk of Works. I really do not know who laid out the foundations. I suppose Mr. Morris did it, or his assistant, Mr. Grist. We held Mr. Morris responsible for it. We did not check the foundations while they were being laid or constructed, and we took no measurements of them, till Mr. Page came in January, 1861. I do not consider it was our duty to do so. Trusting to the competency of Mr. Morris, who was employed by the Department of Public Works, as competent to do his duty, I took it for granted the foundations were right, and I did not interfere in any way about them. I drew his attention several times to the extra thickness of the walls generally, and he told me they were made thick at the instance of the contractor. He said they were done without his order.

I told him to be careful. I inferred from what he said, the contractor was doing it on his own responsibility. The progress estimates were signed by us on the measurements of Mr. Morris, who, I understood, was measuring the walls in order not to include more than ought to have been done. From the extreme unevenness of the ground, its being encumbered with material and the stone from the excavation, and sand, it was very difficult to lay out the foundations correctly, and I told the Clerk of Works he would be justified in laying them out so thick, that he should have no difficulty in laying out the contract wall, when he came to do it. From the detached way in which the foundations were obliged to be begun, I should have thought it wrong in the Clerk of Works to have tried to lay them out to an inch, or even six inches either way. I think no one now coming on the ground, and seeing the work as it is, can form any opinion of the difficulty there was in laying out these foundations. We understood we were employed by the Government as architects, not as clerks of works or mechanics, or foremen of works. The usual practice after an architect is appointed, is, that he has the nominating of the clerk of works, who is paid by the employer, but subject to the entire control of the architect, who when so appointed becomes responsible for the acts of the clerk of works.

In this case, the clerk of works was appointed without our recommendation, and independent of us, and so we are not reponsible for his acts; and, as a fact, Mr. Morris assumed to act, and really did act independently of us. He made reports to the Department, corresponded with the Department, and took instructions from it independent of us. In proof of this I refer to Mr. Keefer's letter to Mr. Morris of the 28th May, 1861. He is there told "he should in future confine his attention exclusively to the Parliament buildings,

and act altogether under the orders of the architect of those buildings, without exerting any authority over the other clerks of works."

From the time Mr. Grist first came upon the works, till after the 29th May, 1861, he never was put under our orders; he was the assistant of Mr. Morris; but the duty of Mr. Grist was from that time to see that our orders were strictly carried into effect.

We do not hold ourselves in any way responsible for the errors in the foundation walls. I never met the Deputy Commissioner from the first commencement of the works till the 28th May, 1861, that I did not remonstrate and protest against Mr. Morris having the general superintendence of the works, and I insisted his duties should be confined to the Parliament buildings under us. As his appointment stood, he had the general superintendence of all the works, and although a clever man, was in a false position himself, and placed us in a humiliating position up to the 28th May, 1861. I regret that I did not at the first take the same stand against Mr. Morris's position, as I did when the arrangements were being made for laying the corner stone.

In reply to my remonstrance about the appointment of clerk of works, I was told it was the practice of the Department, and part of the patronage of the Government.

Knowing the ability of Mr. Morris, his standing and experience in the profession, and his reputation, I certainly thought I was justifiable in trusting him to set out these works.

If the walls were made thick at the instance of the contractor, they ought not to be allowed as extra. I was aware that a great part of the material excavated from the foundations, was used in the foundation walls, but I was not aware that the walls were thickened for the purpose of using that material, although I understood generally from Mr. Morris, they were thickened at the instance of the contractor.

I think the walls might well be allowed six inches thicker than the contract plans, for the reasons I have stated in regard to the laying out the foundations.

If two walls have to be within a foot or two feet of each other, I should leave it to the discretion of the clerk of works to make the work solid or not, and allow it extra or not, in his discretion. I understand the custom in measuring here, to be, that any wall under two feet, is measured as a two feet wall, making 27 feet in the face of the wall, as a toise of 54 feet. No wall in the building, on this rule, ought to be measured as less than two feet thick, although in fact it be less.

When we signed the progress estimates, we assumed Mr. Morris had measured the works according to the usual mode of measurement here. The basement walls were not set out by us; they were by Mr. Morris or his assistant, Mr. Grist; we took no part in it. The reasons why the division walls in the upper story were not carried up with the outer walls, were the want of brick, and the desire to get up the outer walls.

When Mr. Killaly was here, the walls were not at their present height, and it was deemed expedient to have them up, and the cornice put on, before they were covered in for the winter. The division walls were, for these reasons, not built with the rest.

These walls were carried up in part after the work was stopped. I am not prepared to say why the brick lining of the wall was not carried up with the walls.

I understood when I complained of it, the want of bricks was no reason, but the clerk of works had no instructions from us to deviate from the usual mode of doing the work. I do not think it was necessary in every case to carry up the division walls with the outer walls.

It is not right that a wall should overhang the foundation a foot, but it may safely do so, for the plinth batters eleven inches.

14th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN.

JOSEPH SHEARD, VICTOR BOURGEAU.

THOMAS FULLER,—Examination continued.

I gave no special order that I can remember, one way or the other, for carrying, or not carrying up the division walls with the outer walls.

The tie between the principal walls and the division walls, can best be made when they are built at the same time.

If the outer wall is to be carried higher, or have much greater weight on it than the division walls, it is better not to build them together, but have a chase for the division walls.

Some of the thin walls between closets were purposely left down. I do not remember that any others were. I remember no instance in which Mr. Morris refused to obey, or evaded our orders. He did not latterly always carry them properly out. I did think Mr. Morris assumed authority inconsistent with his duty as clerk of works. He came and went as he pleased, and was frequently absent from the works, and I always suspected he was in communication with the Deputy Commissioner, and exercising a surveillance on the architects. Mr. Morris assumed a position inconsistent with his duty, even after he had been told to hold himself under our orders. On the 22nd October, 1861, we had a letter from the Department, No. 38,815, (see letter). This we communicated to Mr. Morris He replied to it on the 25th October, in these words. "I beg respectfully to acknowledge receipt of your letter, containing a communication from the Department of Public Works, and in reply thereto, beg to remark that my appointment as clerk of works proceeds direct from the Government, and my tenure of office is such as to preclude my recognition of the subject mentioned in that communication, or the method adopted of communicating the same, inasmuch as I am not in any way in your service."

As regards the measurements, I verbally told Mr. Morris to adopt the local measurements of the place. I gave no directions as to what that was, for I did not know myself. We took the measurements from him and certified them on his return. I learned from Mr. Morris and Mr. Grist, that they measured rubble masonry by the toise of 54 feet, as by the contracts; the cut-stone without the beds or joints; the moulded work was measured by its girth; plain work by its superficial face without bed or joint; the joints were measured in as rubble work; openings were deducted. I believe half the arch was allowed. Bricks by the thousand, counting 17 to the cubic foot. Excavation by the cubic yard. Chamfered work by the foot run. Mitres so much measured by the lineal foot. Carving 76 cents per lineal foot, including the preparin the stone. Circular work, the mean measurement, adding 8 cents a foot. Circular moulded work, 17 cents in addition to plane moulded work; straight work, moulded, 31 cents Sunk face 35 cents a foot. Sunk face circular 50 cents. These prices all apply to Ohio stone. Native sand stone bush hammered was 23 cents. Circular 35 cents. Sunk work 56 cents. Circular sunk work 84 cents per foot. These standards of measurements, we took from the clerks of works, as being the local standard, and these were the prices allowed in the progress estimates, which are not final. These prices corresponded, as far as they could be estimated, with the schedule prices. I cannot say whether these prices were warranted by the amount of the contract. I cannot well determine this without quantities. My impression is they were in excess of the contract.

The contractors complained about the mode of measurement, prices, and everything else. The complaints applied to contract and extra work. By a letter dated 12th June,

1860, we were asked to report whether in our opinion the gross amount of the contract would warrant any increase of price upon the items of the schedule furnished therewith, or whether it would be fair and just to the contractors and the Government to raise the price of these items and take it off others, regulating the whole, however, in such a manner as not to exceed or fall short of the gross amount of the contract. (See letter of the Department, No. 32,513.) We did not report on that letter, for, on the 4th June, we had a telegram from the Secretary of the Department to say, "Commissioner wishes to see you here at once, on subject of revision of schedule" Mr. Stent, of the Departmental Buildings, was summoned also. I and he were at Quebec on the 6th June; the 7th was a holiday, and on the 8th we had an interview with Mr. Keefer, the contractors being present. After a long conversation, Mr. Stent and I declined to make any alteration on our own responsibility. We returned to Ottawa, and the prices were returned on the estimates as they had been. From my experience, rather than from any test, and from the fact that the schedule of prices had been prepared on a reduced scale for Mr. McGreevy, contractor, I think these prices were not remunerative.

The progress estimate of June, 1861, was signed by us; we signed none afterwards till we signed the one returned by Mr. Killaly. On the 2nd August, 1861, I was at Quebec, and had an interview with Mr. Cauchon, the Commissioner, who stated there had been many complaints from the contractor, as to the mode of measurement and the estimate. He asked me if I had any objection to be relieved from the responsibility of measurements and estimates; I said, I certainly had not. On my return to Ottawa, I found the July estimate had been sent by Mr. Bowes, without being shown to us, and we received from the Department a letter dated 14th August, 1861. I know of no other reasons for the change than those stated by the Commissioner to me, and in that letter. But in a letter from the Department, dated the 28th June, we had enclosed a letter from Mr. McGreevy, dated 22nd June, and we were requested to report on the various matters therein referred to. Some time in the beginning of July—the day does not appear in our copy of the letter—we replied to the various matters alluded to by Mr. McGreevy, referred to in the letter of the Department of the 28th; I refer to the letter which I wish read. From this time the measurements and returns were made by Mr. Bowes. (See his letter of instructions from the Department, dated 31st May, 1861; and see also his further instructions as regards returning of estimates, dated about the end of July) We furnished no figured plans, and no plans of the foundations, to clerks of works. The contract plans were sufficient. These were on a scale of ten feet to an inch; we were quite prepared to make such plans, but Mr. Morris, the clerk of works, said they were sufficient, and we furnished no other. I consider any competent man could lay out the foundations from such plans.

There were no estimates ever made by us, or asked for by the Department of Public Works, in regard to the excavations for drains and ducts necessary for the introduction of Mr. Garth's heating and ventilating system. It is not for me to say what the Department ought to have done in reference to this, but if I had been introducing such a system, I should have had an estimate of the cost of the works it was likely to entail. If the appropriation first made was all that was intended for the Public Buildings, it did not warrant their undertaking it at all, far less the introduction of the system of heating and ventilating; but I looked upon that appropriation only as a beginning, and I never heard any other opinion expressed. It was known to the Deputy Commissioner of Public Works that the preparation for the introduction of this system of heating and ventilating into the Parliament Building would cost £30,000, for he was told this by myself and Mr. Morris, and a like sum for the other buildings.

The progress estimates were not palpably in excess of the sum, until Mr. Page came On the joint representation of Mr. Keefer and myself, in which the Commissioner concurred, I understood the system was adopted. I refer to the report and its adoption, published in the Blue Book, pages 138 and 144. The works, while in progress, were visited by the Commissioner, on the 20th December, 1859; on the 4th July, 1860; in September, with the Prince of Wales, laying the corner stone; by the Deputy Commissioner on the 20th December, 1859; 11th April, 1860; 21st June, 1860; in September, with the Prince of Wales; 4th October, 1860; 22nd May, 1861, three weeks; 10th July, 1861.

Mr. Cauchon was here in July, 1861; Mr. Page on the 18th December, 1860, almost constantly till March, 1861. Mr. Rubidge was with Mr. Keefer in May, 1861, and remained a few days longer than Mr. Keefer. These are all the visits of which I can speak.

We recommended that a model should be made of the library. I sent two tenders for its construction to the Department. Zollicoffer's was $200, but he was paid $600, because it was altered and additions made to it. Mr. Keefer was consulted about it in April and in June, and he approved of all that was done. Mr. Keefer authorised the payment of the money for it. Zollicoffer lost on his contract work, but was well paid for his extra. I think he lost on the whole. In any buildings I have ever had, there never has been any objection to having models made; in fact there ought to have been models made of the principal portions of all the buildings. In the absence of Clerk of Works, I have given plans and instructions to contractor's foremen; there was no unwillingness on their part to follow them out.

From the time we were first instructed to draw up the contract prices, we were looking at specimens of stone for the building, and for the rubble facing of the walls. On the 20th January, 1860, we sent in a report recommending Nepean and Templeton stone, and estimated the additional cost at $15,400. I refer to the Blue Book, page 253.

Upon this the Commissioner of Public Works reported, and on the 2nd June, 1860, an Order in Council authorised the change on certain conditions—(See Blue Book, page 264.) I believe this Order in Council was communicated to us in a letter which we have not now, and I think the change was communicated to the contractors directly. In estimating this work for the progress estimates, it was put at 21 cents in addition to the contract prices.

This sandstone is unquestionably more durable than limestone. I cannot speak positively as to whether the contractor bound himself to the conditions of the Order in Council, but I know we estimated the extra expense at 21 cents over the contract price, per superficial foot of wall in the progress estimates.

When Mr. Page came in the beginning of 1861, we made a measurement of the walls as far as we could. We took the measurements from the Clerk of Works, and estimated them as near as we could.

Our estimate of work done is dated the 1st February, 1861, which see. The work done on the contract was estimated at the rates I mentioned, but the extra work was valued at prices, then approved by Mr. Page, on contractors' claim. Our report and his approval, see memorandum published in Blue Book, pages 284, 292. In our report, the prices at which we returned the extra work appear, and the reason of these changes. On that occasion Mr. McGreevy asked leave to put in his statement. We made our report as being the sole arbiters of the prices, as one of the conditions under which the contractor tendered, and it was approved by Mr. Page. The assent of the Commissioner was not asked.

On the 6th June following, the contractor did complain of these prices. He wanted one dollar a foot for Ohio stone. He wanted beds, and in some cases the face, of Ohio and Brockville stone, and the deduction of the openings on the face of the buildings, but we took no notice of this, as the prices we fixed on were for progress estimates only.

He also complained that material for extra work had been estimated as for contract work. Filling to walls, stone and sand in rubble masonry. Ohio stone, Arnprior marble, sand stone flagging, labour, clay pipes, brick. And he complained there was no progress estimate on labour, on flues, block stone in piers, sand stone flagging in lintels, block sand stone, and labour on same, in quoins below ground level, extracting shaft and extension of main tower. Face work in do. Carpenters work in lintels, sashes, architraves, &c., in part of basement. These prices we continued until we gave up signing the estimates. When Mr. Killaly came, we considered he had the supreme authority to fix and determine every thing. We only signed his estimate as a matter of form, without any responsibility whatever. As we understood it, the progress estimate of work done and materials delivered for the Parliament Buildings, to the 1st October, 1861, was based upon the rates of prices

and principles of measurement for past and future works, arrived at and approved of by the Hon. H. H. Killaly, and Thomas McGreevy, as the heading of it shows. I gave my opinion once on being asked, but I and my partner took no responsibility in it. It bears at the end of it our certificate as to its correctness, but we only certified it as based upon the principles and terms stated in its heading, and not as to the correctness of the prices. I understood these prices were settled as a compromise, which he had full power to make. I do not recollect any direct request from Mr. Killaly that I should sign this estimate; but I recollect saying to him, "I can have no objection to sign it, when by its heading you assume the principles and rates upon which it is based"; and I say now, that it was upon his desire, in some way expressed, though I cannot now remember the distinct terms of it, I did sign it. My estimate of the amount required to finish the buildings, stated in Mr. Killaly's report, is based upon his prices and mode of measurement, not upon any estimate of my own. I cannot say how much it is in excess of the contract prices, or of the prices we settled with Mr. Page; and I have never made any estimate as to what it will take to finish the buildings. I should not like to venture even a guess estimate. A positive estimate would take months to make, those of Mr. Killaly are but approximate estimates. The estimates we made for Mr. Page, of work done, was approximate; the work then to be done, except upon the library, was upon quantities. I never made out the quantities of work which our plans required. The tender we volunteered, when we sent in our competition designs was from Ginty & Co. I only know, and I cannot speak of responsibility, and I do not know the securities they offered. Up to the time the change was made in the position of Mr. Morris, he certified to the time of the Clerks of Works; we did it since, up to last month.

Mr. Morris is competent for his work. Mr. Grist is good for office work, and generally speaking correct, except as to laying out work. Mr. Larose does not profess to be able to make calculations or draw out plans, but he is very competent to lay out, and superintend the practical part of the work. Mr. Bowes is thoroughly competent in every way. I understood Mr. Larose's salary originally was at the rate of $1,116 a year; that of Mr. John Bowes $1,000 a year; and of Mr. Grist, $1,000 a year. Mr. Morris got $1200 a year, and by a letter from the Department of the 19th day of August, 1861, the salary of Mr. Larose was made $1400 a year, and that of Bowes, $1200 a year. The salary of Grist was not increased.

There was no basement in front in either of the wings. We were ordered to put in a basement, and in doing so, we advised the extra cut stone work below the plinth and the windows to be weathered and gabled, and the walls thickened. The drawings were shown to Mr. Keefer, and he made no objections.

The cornice projects over the wall 1 foot 3 inches, the batter of this at 10 feet below the plinth, including the plinth projects 11 inches beyond the wall. Mr. Morris told me he thought it best to have the foundation of the tower solid, and asked me if I thought so too, and I said I did.

I remember on consulting with Mr. Morris about the thickness of the air ducts inside the building; we directed they should not be less than two feet. The walls facing the courts were to be brick in the original specification. There were no brick fit for it, and when we determined to use other material, we substituted Nepean stone for the brick. The jambs in the basement are thicker than was intended, and there is extra work. Who ordered it I do not know positively. I think it was Mr. Grist who told Mr. McGreevy's foreman to make it like the others. I was not aware the bricks Mr. Morris had rejected were put into the Parliament buildings. They were certainly not by my orders.

The projection of the main tower, 9 feet more to the front of the building, was at my suggestion, and under the verbal order of the Deputy Commissioner. I suggested in the presence of Mr. Morris, marble columns in the main tower.

The Deputy Commissioner approved of them, and they were put in.

They were taken out again because sufficient allowance had not been made for the compressing of the masonry, and the pillars would have been injured.

The flagstones for bonding the buttresses of the main tower, were not ordered by us, but the contractor claims them as extra, and they have been allowed. They had to be of the same material as the facing.

If the facing had been limestone, the bonding stones would have been limestone also, and not extra. The butresses of the library are 8 feet 6 inches by 4 feet, by several orders approved of by the Deputy Commissioner. We gave instructions to Mr. Larose, and Grist, to set out the ground floor walls on the basement walls. A great portion of this I superintended myself.

The original specification, calls for stones of different sizes and colours, for the relieving arches. After the Nepean stone was determined on, we wished the darker coloured Templeton stone to be used for the relieving arches.

At this time, the red sandstone had been used on the Departmental Buildings, and I admired it. Robert McGreevy said to me, "if you have no objections I will use that red stone, if you will allow me to use it of irregular sizes." I consented, and it was used, and not considered as an extra. He soon after claimed it as extra, but it was not allowed, and became one of his subjects of complaint.

15th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

THOMAS FULLER,—Examination continued.

I do not know the rule for measuring cut stone in Ottawa, but I believe it to be face measurement. In measuring ashlar work no bed or joint is allowed except on bond stones. In measuring the work on the boiler house, and air ducts, I measured the face only. This would I believe be consistent with the rule in Ottawa. All the cut stone was measured on the face. I cannot say how much of the work yet to be done can be referred to as contract work, and what extra work.

There is now so much additional work, and so much change in the work, that the contract can with difficulty be applied, excepting by measuring the whole work, and deducting what the contract called for. I think in justice between the contractor and the public, the whole work should be fairly measured, and valued without reference to the contract. The additional work, I call all below the contract line for the foundation, and all connected with the heating and ventilating.

These were so very much that before the contractor began his contract work at all, material had become higher, and wages higher, and in this way he is called upon to fulfil his contract, which under circumstances the most favourable, must have resulted in a loss. I cannot tell how wide the excavation in the rock is beyond the walls; the clerk of works measured it, and the entries were made in that book which is lost. The hoop iron bond was discontinued as unnecessary, by our order. The Deputy Commissioner was present I think when I stated it. Before we made our report on the Heating and Ventilating we had conversed and consulted with Mr. Garth, in presence of the Deputy Commissioner, about it. We have a book, in which is shown the working drawings delivered to the contractor, and the time of their delivery. I put it in (see No. 6 exhibit).

There was no one specially appointed to superintend the Joiners' and Stone Cutters' work in the shops, it was unnecessary. Mr. Morris and Mr. Larose, did what was necessary, as part of their duty.

When I found the foundation wall had been put in wrong, I requested Mr. Larose to have another wall put in alongside the other; both were measured to the contractor as I understood. With reference to these wrong walls in the foundation, I never could learn satisfactorily to whom the mistakes should be attributed, whether the clerk of works or the contractors' foreman, so we allowed them to the contractor.

I do not remember, that I ever ordered any of them to be taken down, in these foundations. The pillars in the lobbies of both legislative chambers were to be of Ohio stone. Thinking marble to be so much better, I made drawings, and an estimate for them, which I sent to the Department for approval.

In the meantime Mr. McGreevy, thinking the change would be allowed, ordered the marble, and proceeded with the work without orders. After a correspondence with the Department, the change was not sanctioned. I do not know whether it was allowed as Ohio stone, or marble either before or at Mr. Killaly's measurement.

The contractor was probably misled by the delay of the Department. We sent the estimate, and order for approval on the 31st July, 1861; the letter of disallowance is dated the 4th September, and was received about two days after its date.

The ceilings of the upper floors were to have been of wood, but by a letter from the Department, 1861, No. 38259, which see, the upper tier of joists and ceilings, were to be made of iron and fireproof materials, also the roofs of the corridors and tower structures, leaning against the main building, and the Library, were to be of iron. We were requested to prepare the necessary plans, specifications, and estimates for these works, together with the order for the contract to execute them. I put in the various orders for the different works. In the basement, under the members' lobby, there were to be six piers. Mr. Morris asked me if I had any objection to making the alteration to these as they are now. I said not.

I did not suppose the alteration would make any extra. I never saw what I could say was a wilful attempt on the part of the contractor to make extra work.

There was an alteration in the saloons caused by a vault for the heating and ventilating. Detached pillars and arches were shown on the plan. I caused them to be changed as they are now.

I gave no written order but a drawing. By a letter of the Department dated 27th September, 1861, and the 28th, we were informed that the works were to be stopped at the end of that month, and they were stopped. But I cannot tell what damage Mr. McGreevy sustained by that stoppage. On the 18th July, 1861, we had a letter from the Department of Public Works, requesting us to prepare, and furnish the Department with plans, specifications and estimates for the setting and roofing the boilers connected with the heating and ventilating of the Parliament buildings. (See letter). We had another letter from the Department dated the 30th July, 1861, requesting us to submit for the approval of the Commissioner, the order to the contractor to do the proposed work for the setting and roofing of the boilers. (See letter.)

In accordance with these instructions, on the 19th August, 1861, we forwarded the plans, Nos. 81, 82 and 83; also the estimate at prices approved of, by the Chief Engineer, in January last. The estimate was $20,900. (See letter, and estimate in detail.)

This included the main ventilating shaft, of 130 feet in height. A letter of the Department, 11th September, 1861, requested us to prepare, and transmit for the approval of the Commissioner, an order for the contractor to proceed with the works, necessary to the roofing of the boiler house, setting &c., as shown in drawings, Nos. 81, 82 and 83, and to say that in the meantime the contractor had been authorised to begin the works.

It did not appear whether the fronts of Mr. Garth's boilers were to be brick or iron. By a letter, dated 20th July, 1861, we were requested to prepare and send down plans, specifications, and estimates for boiler fronts, in connection with the heating and ventilating of the Parliament Buildings; also requesting us to transmit the order to the contractor to do the proposed work. (See letter No. 37,595.) As requested, on the 19th August, 1861, we complied with that request and sent the estimate—$4,390. (See letters to Secretary of Department, of this date.) There were quantities taken from our plans, while they

lay in our office, for the inspection of contractors. A Mr. Simmons took them, Mr. Gundry, and others. I got a copy of Mr. Simmons' quantities, but he was there on his own responsibility, not ours; we had nothing whatever to do with him in the matter of these quantities. Simmons had been in our office, but I told Mr. Morris, at Quebec, and all the contractors I saw, that we had nothing to do with his quantities.

The plan I put in is on a scale of eight feet to an inch, and shows correctly for all practical purposes, the foundation walls, as they are, in light blue, and upon them the contract walls in darker blue. I cannot swear to their being absolutely correct, but correct enough to show what is intended. When the foundation walls are figured from positive measurements, the difference will appear in numbers between the contract walls and those actually executed. In the meantime they are not figured. We never assented to the Order in Council of the 9th November, 1859, and we did not undertake to do the duty imposed on us, with regard to measurements stated in the letter to us of 12th December, 1859, only through the clerk of works. I never knew monthly measurements and estimates being made where there was a contract. In large buildings there is always a measurer appointed for that purpose. I considered it to be the duty of architects to prepare all plans, generally supervise the work, and to give certificates to builders in relation to the contract. Although the architect is not supposed to measure the work performed, he is responsible for it if the clerk of works is appointed at his recommendation. If he measures extra or additional work, he has a right to be paid for it, and to be paid incidental and travelling expenses.

I quite agree with Mr. Morris that the power of an architect ought to be supreme on the work and his responsibilities equal to his power; but I do not think the architects were supreme on this work, and they were relieved from the responsibility by the appointment and duties of Mr. Morris. I should trust to the clerks of works to see that the work was properly laid out, without myself constantly measuring and testing it. I told the Deputy Commissioner I would not measure for the monthly estimates, and he knew the view I took of my responsibilities. The estimate of Mr. Killaly, for finishing the works, was made by us and Mr. Bowes, and calculated at the prices and measurements Mr. Killaly established. The model of the library was changed from that of the plan, on consultation with Mr. Keefer, on our suggestion.

(Signed,) THOS. FULLER.

THOMAS STENT, sworn.

I am an architect by profession, and have been engaged in it nineteen years. I have been engaged at buildings all my life. My father was a contractor. I have been engaged in this Province as an architect for seven years. I am the partner of Augustus Laver. He and I are the architects of the Departmental buildings at Ottawa.

I and my partner put in competing designs for all the Parliament buildings here, but our design for the Departmental buildings was the one adopted with modifications.

It was from the public notice we sent in our designs to the Department at Quebec. We were soon after notified that our design for the Departmental buildings was awarded the first premium, and our design for the Parliament buildings, the second.

We had a telegram requesting us to go to Quebec, then a letter dated the 3rd day of September, 1859, from the Assistant Secretary of the Province, saying: "I have the honour to inform you that the series of plans, &c., for certain public buildings at Ottawa, submitted by you, and to which the first premium has been awarded, are not considered by the Government to be perfectly adapted to the purposes for which they are intended, and that these plans will not therefore be adopted, unless they can be so altered, as to be made satisfactory to the Government. Should you desire to alter your plans so as to make them meet the requirements of the Government, it will be necessary for you to repair to

Quebec at your earliest convenience, to confer with the Department of Public Works there on the subject. The Government will not however be liable for any expenses you may incur in the matter."

We went to Quebec for this purpose on the 8th day of September, 1859, and on the 9th we had an interview with Mr. Keefer the Deputy Commissioner, and from him we took instructions to alter the plans, so that instead of retaining the block shape, with courts in the middle, they assumed the form of an L.

It was suggested by the Deputy Commissioner verbally, that the buildings should be three stories. We left for Ottawa, and there received written instructions, (which see dated 14th September, 1859, No. 29103,) for altering and perfecting the designs.

On the 19th of the same month we had a note from the Deputy Commissioner, marked "unofficial," telling us that in the official letter sent from the Department respecting the modification of the Departmental plans, which we submitted, it was conditioned that there should be three stories to the buildings, but upon further consideration, he thinks, that giving these buildings three stories, when the Parliamentary have but two, will not be right, and asks us to consider it well before completing the plans, as it forcibly strikes him, they might be kept down to two stories, in order to produce a good effect. If we agreed with him on this, we were to prepare plans accordingly, and he would have the instructions modified in this respect.

16th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C. CHAIRMAN.

JOSEPH SHEARD, VICTOR BOURGEAU.

THOMAS STENT,—Examination continued.

Acting on the instructions and this note, we modified the plans to their present shape, and on the 8th September, the public notice to contractors was published. (See Blue Book, page 19.) In every building I have had to do with, I have made out exact quantities for my own satisfaction, and for the purpose of giving them to intending contractors, and being paid for them, as I understood the English custom to be. In accordance with this view, we published a notice in the newspapers addressed to contractors, that "lithographed bills of quantities for the Departmental buildings, may be obtained on and after the 15th October, by applying to the architects at Ottawa. Persons wishing to have copies will please give early notice thereof." This had attracted the notice of the Department, and we received a letter dated 2nd October, 1859, from the Department, No. 29307, which see, stating it was contrary to the practice of the Department to supply such information to contractors, and we were requested not to commit the Department, in that particular, to any bills of quantities which we might think proper to furnish. And we were told to inform intending contractors, that such bills were not given by the Department, and that the Department would not hold themselves responsible for them.

Mr. Keefer wrote requesting us to furnish a copy, to an intending contractor. (See No. 64.) We proceeded in making the plans, but we found it impossible to get them out in time, and the time was postponed. The plans were completed and sent, on the evening of the 15th October. They arrived at Quebec on the 17th or 18th of October. And the specifications were sent on a day or two after. At the same time they were sent to Toronto.

During the time Mr. Keefer was in Ottawa, on the 6th October, he had directed us to have the specifications translated into French, and both English and French copies printed. On the 12th October, we had a telegram from Toronto from Mr. Keefer, saying, "the heating of the buildings may be left out of the specification, and made a separate contract." We had not contemplated any complex system of heating. We had provided for the ordinary ventilation. Our plan provided a boiler house, extracting and smoke shaft. On the same day we had another telegram from Mr. Keefer telling us to specify time for the completion of the Departmental buildings 1st January, 1862. And we specified it accordingly. On the 22nd October we had two telegrams from Mr. Keefer, from Quebec, one to say, "the time for receiving tenders here for the public buildings at Ottawa, is postponed until Tuesday, the 15th November, at noon." By the other, he wished to see me at Quebec, respecting our specification, as soon as I could come down.

I went immediately to Quebec, and received instructions to modify the specification, which I did. In accordance with the rule of our profession, we included in our specification certain general conditions which we considered material. They are to be found in the original printed specification, which see. These were left out; some of them however were embodied in the contract, others not.

I superintended the printing of the specifications and brought them up to Ottawa. At Quebec, Toronto and Ottawa, our plans and specifications lay for the inspection of persons wishing to contract. We received printed blank forms of tenders, and blank schedules, to give to intending contractors, and we got more of these forms printed here, but we had nothing to do with making these. The tender of Mr. McGreevy had been sent in without a schedule, and when it was decided to adopt the tender, I was requested, with Mr. Fuller, and Mr. Morris, to prepare a schedule which should be applicable to that tender, as regarded the Departmental buildings.

We consulted together, and looking at three of the schedules which had been sent in with tenders from other parties, which we considered fair ones, we ascertained an average proportion of the gross amount of them compared with Mr. McGreevy's, and we reduced the prices accordingly, so as to apply to his contract. It was understood by the Deputy Commissioner and us all, that the contract was too low. It was lower by 35 per cent than the average of the three other tenders, which we considered fair ones.

The schedule thus prepared, was intended for Mr. McGreevy's contract, for progress estimates. Having made this schedule, I and Mr. Morris, applied it to our quantities of the departmental buildings, and found it came within £500 of the tender. McGreevy put in a gross sum for all the buildings, and separate ones also. We took his separate tender for the departmental buildings into our consideration. This schedule was left in the department.

We were not aware that Messrs. Jones, Haycock & Co., had the contract for the departmental buildings, until we received a letter from the department, of the 10th December, No. 30053. On receiving this letter we obeyed its instructions, and went on with the work. Our plan had no reference to the ground as it actually was, but to an assumed line. The ground line was assumed to be three feet three inches below the level of the ground floor, and the foundation of the excavated parts of the buildings was 9 feet below that assumed ground line, in all 12 feet 3 inches below the floor line. In the unexcavated parts, the foundation line was 4 feet below the assumed ground line, in all 7 feet 3 inches below the floor line.

Mr. Morris had a plan of the site, and its levels, and from him we received instructions where to place the buildings. Subsequently we had a letter from the department, No. 30691, of 1st February, 1860, informing us that the block plan showing the sites of the parliamentary and departmental buildings, and their levels, had been submitted to and approved of by Order of Council, and the Commissioner, and we were to arrange the levels of the buildings, as thereupon represented. We personally staked out the cardinal points of the buildings, with the assistance of Mr. Morris, and left him, as clerk of the works, to lay out the foundation. We gave him the ground plan of the buildings, on which the sizes of the rooms were figured. If we had been at a distance, we should have given plans figured, showing dimensions of wall, and projections, but as we were on the spot, we did

not think it necessary. The sections showed the footings of the walls and the specification described the footings. They were to be of two courses of six inches deep, and to project not less than four inches.

From Mr. Morris' known efficiency we did not consider figure drawings necessary. I believe the walls are built in accordance with the specifications, part of the back walls excepted. Save where they are affected by the heating and ventilating system, they are built in accordance with the plans and specifications, excepting in little details, but there is an extension of considerable magnitude on the eastern extremity of the east block. As we designed that building, it was thought of importance to have the front overlooking the city of imposing appearance, and the end towards the parliamentary buildings not so much so.

In the letter to us of the 10th December, from the department, No. 30,053, we were directed to alter the position of the small tower of the eastern building, and place it at the east end of the Wellington Street front. In the original plans there were arrangements for the departments, but on Mr. Keefer's visit in April, there was a new arrangement made. The departments, excepting the Bureau of Agriculture, took nearly all the buildings, excepting the east end of the east wing, which was found too small for that department. We prepared a design showing the required room and extension, and the elevation overlooking the city. This we submitted to Mr. Keefer on his visit in June, 1860, and he approved of it. Mr. Morris was cognizant of this design, and was present when it was submitted to Mr. Keefer, and approved of by him. This is additional to the contract. We had no written order for this work. No estimate was made or called for, but it was approved of, and done with Mr Keefer's approval. At the same time we had submitted to him plans of parapets and pedestals to all the entrances, as well as the fact, that, the building having been ordered not to be put so deep in the ground as originally intended, by 3 feet, steps would be also required; to all of which he expressed his approval.

I omitted to state that on the 26th January 1860, we wrote to the Commissioner of Public Works, to inform him we had pits excavated at different parts of the site of the right hand block of the departmental buildings, for the purpose of ascertaining the nature of the soil, and the depth from the surface to the rock; we found the soil to consist of 5 feet of loamy sand, next to the surface, and an equal quantity of clay immediately below it. Where the rock was deepest, the depth to the rock, at the south-east corner of the buildings, was 13 feet 9 inches, and at the south-west corner 11 feet 6 inches; whilst at the north-west end of the building, it was not more than 6 feet below the surface, and at the proper depth to receive the foundation walls of the building. We begged to suggest the desirability of excavating for all the foundation walls to rest on the rock, as we feared the building would be otherwise insecure. We had prepared an estimate of the additional cost of excavating and walling required to accomplish this, and found the amount to be $4,275.

For answer to this letter, see that of the Department No. 30,783, and which refers to it as being dated on the 1st February, instead of the 26th January, as we have it.

The first information we had of the heating and ventilating was from the letter of the Department, No. 30,636, dated 28th January, 1860, which see. After the receipt of this letter, Mr. Garth came to Ottawa, and submitted his plans to us, and we adapted his plans to ours, and gave directions to carry on the excavations in accordance with his system.

The adaptation of his plan consisted in the lowering the boiler houses ten feet and enlarging them; in a modified system of drainage, deeper by ten feet than we contemplated; in excavating foundations for air ducts; and changing the position of the drains so as to drain the boiler houses.

17th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

SOSEPH SHEARD, VICTOR BOURGEAU.

THOMAS STENT,—Examination continued.

Before we ordered the excavation for the drains and ducts in accordance with Mr. Garth's system, we had a consultation with the Deputy Commissioner and Mr. Morris, who agreed that their proper position was where they were constructed, exterior to the buildings; but Mr. Garth's plans extended only through the exterior walls.

On this consultation, it was agreed by Mr. Keefer, that the termination of the air ducts for such departmental buildings should terminate at the intended fence wall, and should have ornamental piers at their terminations on walls on the south and west. The length of the main sewer of the east Departmental building from the external wall to the bank is 402 feet, and is from 18 to 28 feet in the rock, and about 22 feet wide on top.

There are five air ducts on the east side of the building, but in order to save excavation, we placed them over the sewer, in the same rock excavation.

There is still another duct to be made for the east side of this building. There are also yet five air ducts to be made for it. These are on the west, and terminate on the terrace wall, and two on the south to terminate on the front wall. The ducts were broken off at the external walls, on Mr. Garth's plan, as his contract had nothing whatever to do with the construction of the internal or external ducts, or for the preparation for his system. This preparation, external and internal, was left for us.

There are ten air ducts for the west Departmental building, two on the south, two on the east, one on the north return, four in the court, and one on the west return.

The main sewer extends from the boiler house in a north westerly direction to the bank in the rock, and is 368 feet long, its depth from 25 to 30 feet, average width on top about 22 feet.

Advantage was taken of this excavation, to place five of the air ducts over the sewer, four of which have been constructed, and an opening left for the fifth one.

The other ducts for this building at present terminate at the exterior walls, but are to be constructed and terminate as those in the eastern building. The Deputy Commissioner approved of all these works, and was aware of their extent before they were begun. The only order for this work to the contractor, was the order of the 28th February, 1860, No. 1, Exhibit No. 7, which applied to all the works they did, but the words of which referring to these works are, "and also to excavate for boiler houses, and other works required in connection with the contract for heating and ventilation."

On this order, the contractors performed all the excavations, constructed the air ducts and flues, and did everything which has been done in connection with the heating and ventilating. Although nothing is said in this order of rock excavation, or of the class of masonry to be used in the ducts or boiler houses, it was perfectly understood by Mr. Keefer that it was rock excavation, and that the masonry was to be of the class generally that it is, and as in our instructions, which were, to be in as complete a manner as it was possible for us to devise. (See letter 28th January, 1860, No. 30,636.)

When we were preparing our plans, it was understood the excavations were to be in rock, and it was contrary to our expectation that earth boulders or hard pan excavations, to any extent, were found on the sites of these buildings. Mr. Garth's plan called for air

ducts of brick, but we never contemplated using brick, which was not suitable; but he never dictated to us how they were to be constructed, if they had smooth surfaces.

Before we commenced our air ducts, those in the Parliament buildings had been commenced and their style of masonry determined upon, and in a letter from the department, we were directed to apply the same system of construction as had been adopted on the Parliament buildings.

On all these circumstances, our authority was grounded for constructing these works.

The excavations for these ducts were made chiefly during the summer of 1860.

In January 1861 we found the contractors preparing limestone for them, with the bed outside, or on the cant, as it is termed. This we forbid. On the 6th February, 1861, we addressed a letter to Mr. Page, who was then at Ottawa. We told him, that in going through the estimate for cold air ducts, in connection with the contract for heating and ventilation, on the Departmental buildings, it appeared to us that there might be some modification of the class of work in which they are proposed to be built, and we desired to confer with him on this subject, and wished either to call on him, or meet him at our office, which he pleased. And he replied concurring in our suggestions, and directing us to "at once take the necessary steps to stop all expenditure on works connected with the ducts, other than those required to carry out the mode of construction intimated in the letter above referred to. That is to say, that the sides and arches of the ducts, where they extend much beyond the respective lines of the buildings, are to be formed of a good class of coursed rubble masonry, laid, if need be, in cement mortar for 9 inches or a foot back from the face of the walls, except that the outer end of each, for a distance of 30 feet, may consist of dressed stone, of a similar class to those used for such parts of the ducts as are in the interior of the buildings." (See report and correspondence, Blue Book, 238 to 245); and the works were constructed on this more economical mode, so far as the Departmental buildings were concerned.

We required the excavations for the foundation in the rock, to be two feet wider on each side, than the walls were to be. This is specified. We directed the excavation to be measured to that width, but there would be occasionally instances where a greater width would be made, which would be allowed, but we have the cross sections and measurements. We had only Mr. Morris as clerk of works on the 19th April, 1860. We always thought Mr. Morris had too much work assigned him. No man could act efficiently as clerk of works to three such buildings.

We did not ourselves, as architects, measure the work done for the progress estimates; we did not think it was our duty to do so. We took all our measurements from the clerk of works, but we satisfied ourselves of the extent of the work, by inspection, and we devoted about three days to each estimate, to check the calculations, price the bills, and see they were correct. We never ourselves actually measured the work done, we took it from the clerk of works.

In estimating the work, where it was contract work, we used the schedule attached to the contract. In estimating for extra work we applied what we considered fair current rates. Rock excavation below 5 feet at the rate of $1.90 per cubic yard; below 10 feet $2.25. Rock excavation in sewer for western building $2.25; below 5 feet $3.25 per cubic yard. Rubble limestone masonry per toise of 54 feet $8.00, including openings as solid. Labor on stone of boiler house 90 cents per foot, and the dressed stone was always included with the rubble masonry. Clay excavation, 60 cents per yard below 5 feet; hard-pan, $2.25 below 10 feet. Rock excavation in drain of west departmental building, below 10 feet, $5.00. Cut arches in boiler house, commencing with smoke flues on the soffit, $1.80 per foot; labor to stone on cold air ducts, 37 cents; labor on arches in cold air ducts, measured on the soffit $2.50; arches through divisional walls, measured in the same way, 40 cents; chisselled arrases, 15 cents per lineal foot on quoins; for carting earth from spoil bank for filling in walls, 25 cents, and 51 cents extra for extra haul. Excavating in sewers, under 10 feet, in the Departmental building, $6.00 per yard; for brick, per thousand, in the wall, $10.50, 20 bricks to the cubic foot in common lime; bricks laid in cement $16,00 per thousand. In smoke flues openings were deducted. I have always, in

the Province, measured brick at 20 bricks to the cubic foot. On the eastern Departmental building the prices were lower in some cases: rock excavation, from 10 to 15 feet, $3.00 per yard; below 15 feet, $3.50; below 20 feet, $4.75; below 25 feet $5.25. We allowed for Nepean stone facing 21 cents in addition to limestone, measuring to the angle of splayed jambs to windows and doors, and one-third of the quoins. Plain cut face work on Ohio stone, 20 cents per foot; for sunk and chamered work, 25 cents; centreing for arches, 20 cents; for common iron bars without labor, 7 cents per lb.

In October, 1860, after a correspondence with the Department, we allowed for bricks $12.50 per thousand; iron stanchions and saddle-bars for windows, 18½ cents per lb; Nepean stone, on new work, 35 cents; large block stone in east drain, 30 cents; dished bouchard work, 28 cents; six inch stone flagging to cover drain 15 cents per foot, including work, stone, and labor; fifteen inch glazed stoneware pipes, $1.00 per foot. From February, 1861, brick work was valued at $13.00 per thousand; but from October, 1860, during the investigation by Mr. Page, there was a revision of prices between him and ourselves, some were increased, others diminished, but after this they continued all through at the following rates:—Brickwork, back to October, 1860, $13.80; and back from October, 1860, $12.50 instead of $10.50; $9.36 per toise of 54 feet, 20 inch wall, measured as 2 feet wall, instead of $8.00, originally allowed. Ohio stone, cube measure 80 cents, built in wall; plain rubbed, per foot superficial 26 cents, built in wall; circular work, plain, 32 cents; sunk work, 34 cents; circular, sunk, 42 cents; moulded work, 46 cents; circular moulded, 60 cents; face work on cold air ducts, a reduction of 5 cents. and in work measured according to these prices, openings of doors and windows were not to be deducted,—the additional work in cutting quoins and window jambs being considered equivalent. (See report, Blue Book, pages 303 to 307, and correspondence following). We submitted $1.50 per foot, soffit only being measured, as a fair price for arches of ducts outside the building. And in reference to the dressed stone face in boiler houses, the stone was taken from the excavation for sewers on the right hand block, and for 5 feet above the footings, we proposed to pay for it at 90 cents, above that at 78 cents. This last reduction was made in reference to Mr. Page's letter. (Blue Book, page 307.) These prices having been examined by Mr. Page, we considered they should be embodied in the estimate we were making, as far as they were applicable. At the time, we considered them fair and reasonable as progress prices, and the estimates were made upon them until Mr. Killaly came. From the commencement of the works the prices of material and labour were constantly increasing; that of labour in consequence of the repeated strikes among the men, and of material in the increased demand for it. On our suggestion, contained in our letter to Mr. Page, the Chief Engineer, of the 27th February, 1861, eaves-troughs were dispensed with, and balconies over the doors substituted. Eaves troughs and vertical pipes were both dispensed with. The prices for some of the extra work, in the summer of 1860, were objected to by the Department, and a correspondence followed on the subject. Some were allowed, others not, and they stood open till Mr. Page's visit in the winter of 1860–61.

We fixed these prices chiefly on consultation with the architects of the Parliament Buildings, and sometimes with Mr. Morris, and on our own personal knowledge of the value of the work, as well as local enquiry. I wish to refer to our letter of the 6th October, 1860; also to our letter, of the 15th November, to the Department, and our letter of the 24th December, 1860, to Mr. Page, Chief Engineer of the Department. We never estimated in detail the extra expense of heating and ventilating, and we never estimated the extra and additional work done upon them. There is no estimate of the cost of the buildings, excepting that of Mr. Page and Mr. Killaly, and we made no measurements ourselves for these estimates. Mr. Pattison made the measurements for that estimate; we considered Mr. Killaly a special commissioner, with special powers; we understood from him that he had come to settle disputed points between the contractors and ourselves, and that he was also entrusted to deal with the question of compensation to the contractors for a breach of their contract on the part of the Government, and that he was authorised to enter into the question of compensation to them. The contractors submitted to him their claims and grievances in respect of the works. He requested us to meet him at his office, and we did.

He proposed to get Mr. Pattison, accompanied by some person on the part of the Contractors, to measure the work on a mode of measurement which had been adopted conjointly, and upon which we were consulted. We understood the measurement was made in accordance with this mode, but we had nothing do with it, or with the measurements from June, 1861. We went over the claims of prices for the work as made by the Contractors. Many of these prices we objected to, and they were reduced, and some rejected altogether. Those reduced were so, to the amount mentioned in his report. If we had been consulted as to the settlement, we should have said measure and value of the whole work was the fair mode, at the prices we had been chiefly accustomed to use, and which we settled with Mr. Page. We considered measurement and value as the fair mode, because the contract had been lost in the amount of extra and additional work.

Mr. Killaly thought it would be better to give compensation to the Contractors, in the increased price for their work and materials. He decided upon allowing it upon his mode of settlement.

Messrs. Jones, Haycock & Co., put in the prices they claimed. What was allowed was put by the side of their claim as an equitable compromise. He got all the information he could from us, and from the contractors, as to the value of labor and material. He made the estimate and the value of the work done, and to be done, on his own judgment, and when his estimate was made, he requested us to sign it, and the measurer also. The heading states that that estimate is based upon the rates of prices and the principles of measurement for past and future works arrived at and approved of by Mr. Killaly.

We signed that estimate certifying it to be a correct statement of the amount of material in the building, and that the gross amount, as carried out from the data given, is correct. We do not assume the responsibility of its being correct in detail, nor can we assume the responsibility of saying what is due to the contractors for damages for breach of contract on the part of the government. We assume that the measurements are correct, on the principles Mr. Killaly laid down, but we do not assent to some of the items of his prices.

We do not certify to the measurement, for we never measured the work while in progress or afterwards. We only took the measurement as correct by Pattison, on Mr. Killaly's principles.

18th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU,

THOMAS STENT,—Examination continued.

I consider the measuring of beds and joints as the only true mode of measuring masonry; that is the universal practice in England, and in my own practice, but I object to measuring openings in face work.

The local custom is not to measure beds and joints. In our letter to the Department, we stated that we thought this the fair way, but we knew it was contrary to the rules of the Department, the local custom in this place, and the custom in the Province.

I considered the prices fixed by Mr. Killaly in excess of prices allowed under ordinary circumstances. The question of the prices allowed by Mr. Killaly as the mode of compromise for damages was what I considered out of the ordinary course.

Since the adjournment yesterday, I have considered the matter over, and offer the following as my matured evidence on the subject of my connection, and that of my partner, with Mr. Killaly's visit, viz:—In fixing prices for progress estimates, for extra and additional works, I adopted what I considered a prudent precaution in giving prices which were below the real value of the work; the object of this was to arrive at a certain price, to be paid the contractor on progress work done, at the end of each month.

I conceive this, in certain circumstances, as in large works of this kind, where a contract is taken at manifestly low prices, and the extra work precedes it, or is in a larger quantity, to be our duty, to prevent the contractors from taking advantages, as they might probably do of a large estimate, to dictate to the employer or the architects, or refuse to proceed with their contract work.

We found it impossible in this case to fix the value of work, for the reasons stated, viz: the constantly varying cost of production, both of labour and material.

When Mr. Page called on me for my opinion, I considered that but little contract work was done; and, as the price paid for this contract work was shown by actual measurement and calculation to be very far below its actual cost, I considered that, in justice to the government, we could not at that time materially increase the prices we had been allowing.

If we had done so, it would have been an inducement, or premium, to them to abandon their contract. The constant complaining, sometimes to ourselves and sometimes to the Department, led us to this conclusion.

We were not required by Mr. Page to establish final prices, but to give our opinion as to whether those originally paid were fair, and should continue to be adopted. For progress work a few as stated were raised, and some few reduced by us. This had reference to a contract in operation, and which we desired to preserve intact.

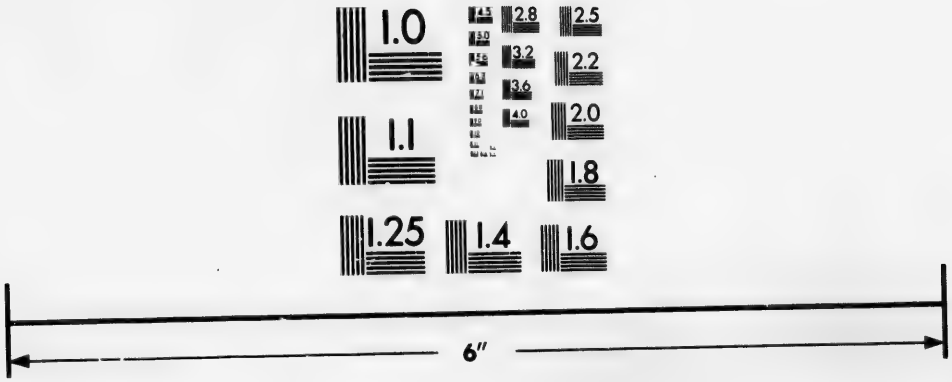
Mr. Page states in his report, that, as from a large portion of the walls being covered with snow, he could not form a decided opinion upon prices, and when the works was suspended by the government, we felt that the whole case was reversed. The contract which we had cherished was abandoned, and the contractors, who had hitherto been controlled by us, had the upper hand, and the precaution which had guided us in determining prices no longer existed, as the contractor would no doubt be entitled to compensation.

Mr. Killaly then called upon us, and stated that he had come to Ottawa, with a view to settle these long disputed points, and wished to know the nature of the differences existing; that he hoped to be able to arrange the matter at once satisfactorily to the government and the contractors; and requested us, in conjunction with himself, to establish prices for extra and additional work, which should embrace the question of compensation to contractors, and be at the same time a final settlement. He took into consideration all the difficulties surrounding the question, and decided they could be arranged by adopting a uniform system of measurement, and giving prices to embrace the amount of compensation.

The whole aspect of the question appeared to us to be changed. We had then to go into the whole matter *ab initio*, and fix prices based upon the actual cost of the work, for all additional and extra work. The system of measurement we considered most applicable was the English system, that of measuring beds and joints to cut stone, and surface measurement for all face work. The latter had been done throughout. There were at the same time many explanations made by the contractors, evidence given of the cost of different classes of work, which had not been previously laid before us.

We were compelled to admit that in some cases we had not sufficiently considered the extreme labour and cost of some portions of the work. We were, moreover, given to understand that the settlement proposed by Mr. Killaly would include a waiver on the part of the contractor of claims for damages for the stoppage of the work, there being no power given in the contract to either Commissioner or Architects to suspend the works; and on that account also, we were induced to take a more liberal view of prices than we should otherwise have done, coupled, as before stated, with the question of compensation.

IMAGE EVALUATION
TEST TARGET (MT-3)



Photographic
Sciences
Corporation

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

2.8
2.5
3.2
2.2
3.6
2.0
1.8
1.1
1.0

It was Mr. Killaly's wish to preserve the contract intact. In view, however, of the almost insurmountable difficulties surrounding this course, we should have preferred adopting a system of measurement and value applied to the whole, as stated by us; and I fully believe that such a course, adopting fair average rates, would result in an amount similar to that arrived at by Mr. Killaly.

I consider that the amount of additional work is so great, and so ramified throughout the whole building, that the contract is entirely absorbed and lost, and that therefore the whole should be measured, and the contract sum deducted.

If a man contracts to work by a certain plan, and that plan is so entirely abandoned that it is impossible to trace the contract and say to what part of the work it shall be applied, in such case the workman shall be permitted to charge for the whole of the work by measure and value, as if no contract at all had been made.

The contract plan showed the foundation to go only four feet below the ground line. All the work under that is additional to the contract; and all the work connected with the heating and ventilating, which includes the excavation for the air ducts, the increased depth of sewers in consequence of the extra ten feet in depth of the boiler house, and the enlargement of the boiler house; the excavation in the foundation walls below the assumed line; the masonry in the drains, ducts, and foundation walls, below the line shown on the contract plans; the altering of most of the foundations of the division walls, to allow the air flues to be built; the building of the extra flues in the division walls; the excavation of the basement, and the introduction of rooms therein; the facing the whole with Nepean stone, and the increased size of the east wing of the eastern departmental building, from 2280 feet superficial, to 4160 feet superficial; the increased length of the north-west wing of the western departmental building; increased chimney flues from the new rooms in the basement; increased size of chimney tops through the roof; the smoke flues from the boiler houses; two new extra air shafts and the others enlarged; a part of the principal ventaduct.

Whenever the stone which came from the foundations was fit for the foundation walls, it was allowed to be used. It was so intended in the specification. It was the right of the contractor and a saving to the government, as it prevented the expense of its removal. I cannot tell what proportion the extra work bore to the contract work. In every estimate it was considerably in excess of the contract work. I have no means, and never had, of telling how much was contract, and how much was extra work.

While very considerable progress had been made in the eastern building, the men were still working at the excavation of the western one; and the works in the two were not kept separate till Mr. Page came, so I cannot tell the relative proportion of each kind of work. When we gave our prices to Mr. Page, we knew that several of the prices were low. Two of the principal items, brick and stone, were put under their value, the rest we considered fair at the time; but when Mr. Killaly came, the whole circumstances became changed in the way I stated. Mr. Killaly gave his instructions to Mr. Pattison to measure the work, without consulting us. He told us what they were.

We understood that no estimate would be recognized by the department, without our signature, and I imagined that in his desire to preserve the contract, he would enforce all its provisions, one of which was that we should sign the estimate. We signed it because we thought he had arrived at a final settlement with the contractors, based on his authority, and he having done so, it became our duty to sign it, as we had all the others. I may mention that at an early stage of the work we had declined to sign some day bills, and payment on them was refused, and this led us to suppose no estimate would be recognized without our signature. I imagine it was understood when we signed that estimate, that it was to give it effect with the department. We did not make that estimate. Pattison made it on Mr. Killaly's instructions, on his principles, and at prices which in part we assented to, and in part objected to; but our view was overruled and the prices fixed on his new scale, which, as we understood, his instructions authorized him to do. Mr. Killaly in fact made two estimates; the first we signed in Quebec, the second in Toronto. We thought he had authority to settle, and had settled the whole matter, and thinking so, we had no objection to acquiesce in it.

I think we are entitled to 5 per cent. on the outlay. The original agreement was made with Mr. Keefer at this rate, and we never acquiesced in the Order in Council limiting our compensation. We believe we cannot compel the Government to alter the Order in Council, but we expect them to treat our claim as a matter of equity and justice, and according to the rule of the profession. I think this style of building is decidedly adapted to this climate. Our plans simply provided for heating and ventilating in the ordinary way. The ordinary fire places are retained—one to every room. The system introduced for heating and ventilating is well adapted to the purpose; we did not contemplate so elaborate a system, but I think it the best that can be adopted. As regards the durability of the Nepean stone, we thought the opinion of Sir William Logan unimpeachable, and our own examination of it confirmed that opinion; I have no doubt of its durability. As to the relative value of this stone, as compared with the limestone originally contemplated, I say that when we estimated the difference at first at 21 cents, it was fair, and if the stone had been got from the quarry then opened it would have been enough. The stone there was in beds, and easily broken square, but the stone from the next quarry did not rise in beds, required to be blasted, and broken with plug and feather, and had to be worked on the beds and joints; I now think it worth fifty cents over and above the value of the limestone. I estimate a cubic foot of the quarry to face a foot of the wall. The average load would be 20 feet, and one load a day per team, the distance 11 or 12 miles. The price for a team per day is 15 shillings to 17s. 6d. I do not know how many feet a man can dress in a day at the quarry.

The windows in front to light the corridors were ordered to conform to the style of windows put in the basement where no excavations were made; they were originally intended to be the same all round as in the rear. Mr. Keefer visited Ottawa, in connection with these works, on the 6th October and 20th December, 1859; and on the 11th April, 21st June, 1st September, and 6th November, 1860; and the 23rd May, 1861; on the last occasion he was accompanied by Mr. Rubidge, the Assistant Engineer. Mr. Rose was at the works on the 20th December, 1859, and on the 5th July, 1860. We took him all over the works, and showed him the excavation for sewers for both buildings. We drew his attention especially to the extra price paid over that on the eastern Departmental building, on excavating the rock on the western one. It was then under discussion to appoint another clerk of works, and we were asked to write an official letter recommending Pelham. Mr. Page visited the works on the 18th December, 1860, and remained till the beginning of March, 1861. Mr. Keefer never disapproved of anything that was going on. On his visit, on the 23rd of May, 1861, he introduced, by letter, Mr. Pattison, as measurer, who has acted ever since. He then directed us to suspend all external work connected with the heating and ventilating, and all work which could be properly delayed, except to complete the ducts in the excavation for the main sewer to the Departmental buildings, and we did it. Mr. Cauchon visited the works on the 22nd July, 1861, and on the 30th October. Mr. Killaly, came on the 26th September, 1861, and remained one week, and again on the 19th October, and remained for three or four weeks.

Before the works were begun at all I and my partner had lime kilns in the neighborhood, which were conducted by our agent. When the contractors took these works they made arrangements to get lime from kilns in Gloucester but it turned out that they could not supply them fast enough. They went to our agent, before they knew we owned the kilns, and got lime. When it came to our knowledge we thought it over, and came to the conclusion there would be no impropriety in our supplying lime, especially when we knew that engineers connected with the Government had supplied cement, lumber, and pressed brick for Government works; they got lime, more or less, from us during the progress of the work. The mortar made from our lime is unexceptionable, and the highest price ever paid was 15 cents a bushel, delivered, and we never sold a bushel to any one else for less than 16 or 17 cents. The price was arranged by the person in charge for us, in consequence of the quantity taken.

We have a record of the times detailed drawings were asked for and supplied. Numerous complaints had been made to the Department, and we replied to them to the satisfaction of the Department, and the contractors were referred back to us. I believe

there was no reason for these complaints. We declined to give the detailed drawings except as the work proceeded.

The cut stone has been set in putty; oil putty is not meant, but fine lime putty, made with fine sand; and this has been used. The brickwork is specified to be Flemish bond, but we did not insist on this. The bricks were of various sizes and was an impediment to this; they are the ordinary bond; there is little difference in the expense; Flemish bond is a header and stretcher alternately; English bond is a heading course, every third or fifth course. Fire bricks and Toronto pressed bricks were dispensed with in the record and vault rooms, with the approval of the Department; they are built of Nepean rubble, lined with Brockville bricks; the difference, if any, was to be deducted. Fire brick and Toronto brick could not be got. They were to be arched, but since the fire-proof system they are covered with iron joists and concrete, or arched at the contractor's pleasure.

When iron has been used instead of arches, no extra should be allowed for fireproofing these vaults, and none was allowed so far as I know. There was no order ever given. The contractor did as he pleased. There are no chases in the walls for pipes for water, or bells as specified. There is no plan yet considered for their introduction. I should have all these covered with a hinged flap, to be accessible at all times. I know the fire-proofing of these safe rooms has not been charged or paid for by the Government. The wall of the hot air chamber along the corridors is one brick and a half thick, and arched. The arch is filled with concrete to the floor. The iron joists rest upon the wall of the chamber, and do not reach the principal wall All this was made to save expense. It was not measured in the progress estimate of Mr. Killaly. Mr. Killaly's estimate was a progress estimate intended to settle the principle and mode of measurement, and the quantities of extra and additional work done, but not as to work done under the contract accurately. The first of Mr. Killaly's estimates was but a partial one; the last one, final to the extent I have just mentioned, as I understood it. The porch to the Governor's entrance is built under the contract, modified by the Deputy Commissioner.

The design of this was not furnished to allow the work to go up with the buildings, but it was only delayed till its design was settled by us. None of the basement walls are of unnecessary thickness. They were set out by the clerk of works, with our sanction. There is no order for cut and picked arches for the air ducts in the corridor wall. We ordered it as a matter of discretion, which was approved of by the Deputy Commissioner. Ohio cut stone dressings for register frames were used under the order of the Department. I refer to our letter of the 15th June 1861, No. 37,365, sanctioning this. Similar letters and sanction apply to the porch at the Governor's entrance, and to the arches at the stair cases, instead of girders.

The stone dressings in the corridor were ordered by us, and are extra, without any order from the Department. We assumed the responsibility of ordering them, to give effect to the entrance. Messrs. Jones, Haycock & Co., claim the Ohio stone in the quoins as extra, in their memorandum to Mr. Killaly. We contended they were not extra, as they were included in the general term "dressing," on the buildings, and farther on, as dressing on the external front. (See specification, Blue Book, pages 104 and 105.) Mr. Killaly overruled our view and allowed the quoins as extra. We had previously reported to the Department that we did not consider them as extra. The corbelling of cornice was allowed extra by Mr. Killaly. We did not think it was extra. Extra scaffolding was claimed by the contractors. We contended it ought not to be allowed as we never specified for building overhand. The record rooms have external walls, and although English fire brick is specified, they could not have been used with propriety. This I overlooked, for there ought to have been a deduction, and there will be, on the final estimate. Mr. Killaly made no deduction for this.

The local custom is to measure any wall less than two feet as two feet. I would measure cut stone with the rubble work, but not allow openings, but in these buildings all the openings in masonry have been measured in compliance with local custom here. I justify it as a compensation for plumbing and forming jambs. I object to measuring masonry in ducts as solid, as the contractors claim it. In measuring the Nepean faces, I should deduct openings. I believe Mr. Killaly allowed it, but I refer to

Pattison's instructions. I refer to a published letter in the blue book, page 307, from ourselves to Mr. Page. It is there stated that we have not deducted openings for doors and windows. Our letter is that we have deducted nett openings. We allowed 20 bricks to the cubic foot. We did allow an extra on brick arches, and splayed work. We concurred in the English mode of measurement of cut stone, as stated in the blue book, page 382. We agreed to the mode of measuring centreing. We concurred in the allowance made for excavating by Mr. Killaly. The felting of the roofs was extra, and we had the approval of the Commissioner to have it put under the slates, to equalize the temperature, and assist ventilation. We ordered the rubbling of the Ohio stone. The contractors claim extra, but it ought not to be allowed, as in our opinion the specification provided for it.

The sloped roof was to be boarded close, and battened, not grooved. It was suggested to us that tongued and grooved would be better; we agreed to it, and the contractor was to do it without extra charge; we were not aware that some of the rafters were 18 to 20 inches apart instead of 14 inches as specified. The Clerk of Works must answer this. The record rooms were to have the iron joists 14 inches apart, by the original contract. When fire-proofing was specified for the rest of the buildings, the iron joists were to be 20 inches apart. We gave no directions to the contractors, and if they put them 20 inches in the record rooms, it was contrary to the specification, and without any order from us, and ought to be deducted from them. The heading of Mr. Garth's schedule of prices is the same as the headings of the other schedules. The prices are said to apply to alterations, additions, or works dispensed with.

We apply his schedule to extra work, but we do not apply the schedule to the extra work of Messrs. Jones, Haycock & Co., for the reason already stated, that the schedule was not to apply to Mr. McGreevy's extra or additional work, as admitted by the Deputy Commissioner, and as Mr. Rose admits as well as Mr. Page. We suggested to the department to dispense with gutters and conducting pipes. They were not used in the Parliament Buildings, and we thought they were better without them, and after discussion it was agreed to by the Department.

We gave an approximate estimate to Mr. Killaly of what would be required to finish the buildings at the prices he fixed, but we made no detail of it. The balcony to the south front entrance of the western Departmental Building, was sanctioned by a letter of the Department, 15th January, 1861, in lieu of a chimney on the roof of the central projection of the east front of the same building. (See No. 37226.) There was a specimen wall built by us, with the sanction of the Department, in order to show the class of work in limestone we required for the buildings. It was being built by the best masons in town. When built it had not the character of the work we required, and we removed it. This was before the tenders were given in. I directed Mr. Morris to have one built of the character required, and it was built, but not in time to show the contractors. Mr. Morris built a wall of Nepean stone to show the contrast between the two, and as a specimen, and this was actually built before any Nepean was used in the buildings.

The contractors cannot complain justly that we required a better wall than was specified, but we think the walls were built well in every respect. I understood it was always intended to use sandstone instead of limestone. It was not, I believe, ever seriously intended to use limestone.

Mr. Morris's competency was of the highest character, but we objected to the mode of his appointment. Mr Hutchison is a good practical mason, but as this is the first building he ever superintended, of the kind, and his experience was local, he was unable to give an opinion on this class of work. He was a good practical builder.

20th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN.

JOSEPH SHEARD, VICTOR BOURGEAU.

THOMAS STENT,—Examination continued.

I objected also to the power assumed by him under his instructions. I have ordered him to do work in a certain way, and he would refuse, (See correspondence between ourselves, Hutchison, and the Department, Nos. 8, 9, 10,) saying the Department held him responsible, not us.

I refer to orders about construction of the roof, about which he was not competent to give an opinion. We superintended the eastern building. His supervision of the building was highly satisfactory, and the building is of the first class.

Mr. Pelham was the other clerk of works. He is a carpenter by trade, a painstaking man, desirous of carrying out his work to the best of his ability. He is competent to do his work, but required more supervision than Mr. Hutchison, in the masonry branch.

Their appointments were made in respect of the one being a builder, and the other a carpenter. They are quite competent to make the required measurements.

Mr. Pattison came here about the 1st day of June, 1861. A copy of his instructions from the Deputy Commissioner was sent to me: (See it marked, exhibit No. 11.)

I will now define our duties as architects, as we understood them, with reference to these buildings. When an architect is appointed to carry on a building, the usual practice is for him to appoint a clerk of works, or clerks of works where more are necessary. He is to be under the entire control of the architect, to carry out his orders. The architect is to prepare all contract drawings and specifications, all detailed and working drawings from time to time, also one copy of the contract drawings, for the use of the building; to see that the different classes of work are properly and efficiently done; to exercise a general supervision on the whole work, either by himself or the clerk of works.

If the architect lives at a distance from the building, he should require reports from time to time from the clerk of works. If these arrangements are carried out, it is his province to assume the responsibility of the correctness of the work, and to certify to its final completion; he is to certify progress estimates upon a per-centage on the value of the work from time to time done.

If the clerk of works is appointed otherwise, it is difficult to define the precise duties of each. Practically, I have accepted the duties, as if the appointment had been regularly made. I accept the responsibility of all the orders given for the work, but not the responsibility of any order given by the clerk of works without consulting us, and the responsibility of the class, or character of the work generally. The clerks of works felt that they had the power of carrying out their own orders, and sometimes did it.

It is not the duty of the architect to measure the work for progress estimates, but to take them from the clerk of works, satisfying himself of their correctness; but at the close of the work, he should be able to speak thoroughly as to their correctness. I do not say he would be expected to make the actual measurements, but to test the measurements of his clerk of works, so as to satisfy himself that they were correct. This applies to extra work of every class He is required to certify the final completion of the contract work, and that it is done according to contract, and to make up a debtor and creditor account of every thing, which shall be final.

We did not ourselves measure for the progress estimates, but we satisfied ourselves of their correctness in the way I have stated. The architect is entitled by the rule of the profession, to 2½ per cent. on the amount of the contract, to be paid when the contract is signed; and further to 2½ per cent. on the progress estimates, as issued to the contractor, and 5 per cent on all extras, for which he ought to prepare all drawings and specifications, and superintend the work. The first 2½ per cent paid, includes the plans for the contract, and a copy of them for the use of the building.

He should be paid his travelling and all other extraneous expenses, in carrying out the work, and for all additional plans that may be required, and a final measurement of extras and additional work.

As regards the order in council about our remuneration, we never considered ourselves as bound by it; we remonstrated against it, as Mr. Fuller stated, and Mr. Rose wished us not to press it at the time. In Mr. Killaly's estimate, as I understood, all the ventilating flues were not extra. There were to be two in each room by the contract. I did not understand the 9th clause of the contract as binding the contractors to make heating flues for Mr. Garth's plan. I considered all the flues his system introduced as extra.

There have been one or two cases of extra walling by mistake, but they have not been allowed to the contractor. One part was removed, the other remains, but was not allowed for. Some of the daily bills of work, in the early part of the work, were for pumping.

Some of the brick work for jambs and linings of windows, was built up before the heating and ventilating plan came. These had to be removed for its introduction. The work was charged as day work, as was the construction of the chimney in the eastern building. The joisting is to be allowed for by the ton. They are all according to the size we gave. There are some division walls left down in the western Departmental building. We understood from the Deputy Commissioner that some re-arrangement of the rooms was contemplated, and we left the walls down, and the joisting out, for this reason. The contractors do not gain by there being no joists against the walls.

The walls have not been made thicker to sustain the iron joists, except in a few cases in the attics. I put in a letter from Mr. Killaly of the 28th December, 1861, on this subject, Exhibit No. 12. I do not approve of a key going through the queenpost. My plan is a wedge underneath. I disapprove of cutting more than is necessary. It was in this respect that Hutchison wished to carry out his own views against ours, of which we complained.

The roof is carried out according to the drawings. The iron strap is weakened by the hole. The straps are not of the size specified; they were allowed to be less, as the specified size was unnecessary I say that we have been actuated by a sense of duty in everything we have done, and a desire to advance the interests of the Government, by whom we were employed. There may have, and doubtless have been errors in judgment, in the conduct of these works, such as our matured experience would lead us to correct, if we had to go over the ground again, but I believe there have been as few errors in construction as ever arose in works of their magnitude. There never was a building carried out, in which another professional man would not discover errors, and things done contrary to what his opinion would adopt; but though it be so, they are but matters of opinion after all, and the opinions of men of equal experience may be considered equally valuable though they do not perfectly accord.

There was no levelling of the walls at the assumed foundation line, to ascertain the additional work, under these assumed lines; it would have been impossible to do it without stopping the work, for the material was piled round, and in the way. The stone from the excavation was used on the building, and estimated in the progress estimates as rubble work, but the stone itself in the Departmental buildings, so far as I know, was not estimated for, as material delivered, until it was in the walls. I think the air ducts exterior to the walls were done cheaper than if they had been left until the completion of the buildings. The boiler houses had to be drained to allow the work to proceed, and when the excavation was made, it was better to construct the air ducts over it, then to fill it up and dig it again for them. And on a consultation with Mr. Keefer, this was decided upon,

and if it had not been done, the blasting of the deep rock before the buildings were done would have had an injurious effect upon them.

The excavation could not have remained open during the progress of the work. The east wing of the eastern Departmental building was not all reckoned extra; only what was in excess of the original plan. The papers I distributed to intending contractors while the plans lay open in our office for inspection, were printed forms of tender and schedules attached. My impression always was, that no tender would be accepted without a schedule.

The schedule Mr. Morris and I made for Mr. McGreevy's tender, was done by Mr. Keefer's orders for the Departmental buildings. Mr. McGreevy knew nothing about it, so far as I know, till it was made.

By the specification, the relieving arches were to be of Malone stone, and sandstone of another colour. If the limestone had been used for the buildings, Nepean or Perth sandstone would have done with the Malone stone. But when Nepean stone was used for the buildings, then some other stone was required to be put alternately with the Malone stone.

The contractors informed me that they would, as they were getting them from Malone, get all of that stone if we assented to it. We did so, but not as extra.

(Signed,) THOMAS STENT.

JOHN GRIST, sworn,—

I am an architect by profession, served my time with Mr. Thomas, in Toronto, commencing in 1847. I was appointed by the Commissioner of Public Works as clerk of works on the Parliament Building from the 28th June, 1860, and I continued till the stoppage of the works in October, 1861. I was employed on the Parliament Building exclusively. When I came, part of the excavation for the foundations of the tower was done; the foundations under the Legislative Council up to the level of the contract footings; the foundations of the boiler house built up about six feet; the excavation for the main tower was going on, and the excavation for the main sewer and the north drains had been commenced; this was the state of works when I came here. I was under the orders of Mr. Morris exclusively; I was not under the orders of the architects except through him. I was employed the first three days drawing the sketch for a tablet for the Chaudiere Bridge. I was then sent into the office to make myself acquainted with the plans of the Parliament Building; this occupied about three days. The plans of the buildings were in an office, open to the contractors and clerks of works. The contractors, before and after I came, caused tracings of the plans to be made for their own use, but the plans always lay in the office open for reference. I then went on the building. My instructions were to measure up for the monthly estimate for June; my instructions were to measure the masonry in the walls as I found it; I was to measure the excavations as I found them, whether they exceeded the width required or not. When I made the measurements, I came into the office to assist Mr. Morris in making up the estimates, and he then informed me that the rock taken from the excavation was to be measured as stone delivered for the rubble work; it was then put in the estimate as material delivered. In every estimate is shown the whole quantity of every class of work, estimated from the commencement of the work. That estimate showed that 10,829 cubic yards of rock, in all, had been estimated, valued at $15,197.23, and 7,992 toises of rubble stone, at 87 cents, delivered, which all came from the foundations, as I believed. I was not aware of any other rubble stone delivered; I do not remember even seeing, till after that time, any rubble stone brought from any other place for the Parliament Building. About the beginning of July I was sent to superintend the work, to see that the walls were

properly filled and mortar put under the stones, the walls bonded, and the work executed in a proper workmanlike manner. I continued at this till the next monthly estimate was made out, after the end of July. I took the measurements for July. I measured the rock excavated during that month, all the walls which had been built, and all the work done My measurements were as accurate as I could make them; either Mr. McGreevy or his clerk assisted me.

From the time I came the foundation walls were gradually extended. I laid none of the foundations out at any time; I was never directed to do it, that I remember. There were no clerks of works on the Parliament Building but Mr. Morris and me. When I came, the greater portion of the work marked within the black line, now pointed out to me on plan D as the foundation laid out by Mr. Morris, had been laid out. Mr. McGreevy's foreman, Mr. Haughy, laid out all the foundations which Mr. Morris did not lay out. I did not direct the laying them out; I may have assisted occasionally but not as a rule; I gave no directions as to the thickness of the walls or their position; I did observe they were unusually thick, and I made an observation to Mr. Haughy about this; he replied they allowed something to come and go on, for setting out the upper walls; there was no leave asked or given to make them other than contract walls, except in one case, in the air duct in the north corridor of the east wing. Mr. Morris allowed the foundation wall under this duct to be solid, instead of two walls under the bottom of that duct; after this the whole of the foundations of these ducts under the corridors of both wings were built partly solid. The walls, as they are found now, were built under the direction of Mr. Haughy, so far as I know. There was no attention paid to my remonstrance. In measuring the walls for the progress estimates, I measured the work just as I found it I say again, I gave no directions about the thickness of these walls, while they were going on. I was then on the works when the walls were levelled up to the basement floor line.

21st AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU

Adjourned examination to allow Mr. Grist to examine the walls of the Parliament Building, and mark their thickness and position on the ground plan spoken of by Messrs. Morris and Fuller.

22nd AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

JOHN GRIST,—Examination continued.

I never made any measurement of the quantity of work done under the assumed foundation line, and none of the quantities of work to the basement line. I was present when the basement floor walls were set off on the foundation walls at the basement floor line. I found some of the foundation walls did not correspond in thickness and position with the basement walls.

It was intended by the plans and specifications that the footings of the foundation walls should be four inches thicker on each side than these walls themselves. I acted as clerk of works under the direction of Mr. Morris, superintending the quality of the work, on the whole of the Parliament building, until the foundation walls were built up to the basement floor line, and some of them above that. When the basement floor walls came to be set out on the foundation walls, it was found that mistakes had been made in the thickness and position of the foundation walls, and my duties were afterwards changed.

I will now speak of the mistakes in these foundation walls, and I refreshed my memory by examining them yesterday, and taking some of their thicknesses and positions. I found the greater number wrong, but some are right. They vary from a few inches to five feet in excess of what they ought to have been. The figures in red on the plan marked D, are my figures, and show the thicknesses of the walls, as I now, on examination and measurement find them. The exterior basement floor walls were to be 3 feet 5 inches. The interior from 9 inches to 3 feet thick.

About the 1st day of June, 1861, I got a letter from Mr. Keefer, dated the 29th May, 1861, which I put in. It is published in the Blue Book, page 347, marked Exhibit No. 13, and about the same time I got a letter dated 1st June, from Messrs. Fuller and Jones, which I also put in, with the sketch showing the portion of the work I was to superintend. The letter is marked Exhibit No. 14, and the plan is marked E. From this time my duties were confined to that part of the building marked in that plan. Mr. Morris and Mr. Larose had also assigned to them separate portions of the building. When any one of the three was absent, one of the others superintended the work. I did part of Mr. Morris's work in his absence. The basement floor walls, where finished to the ground floor, did not correspond with the intended ground floor walls. Some were taken down and rebuilt, the rebuilding allowed to the contractor as extra days' work. Some were corbelled over, and to do this Nepean flagging was used, and the stone allowed extra to the contractors. Iron joists under the wall were allowed as extra. Mr. Fuller gave the order to corbel it over, and I pointed it out to Mr. Bowes, who measured it. The exterior ground floor walls were shown on the contract plan to be 2 feet 6 inches; the interior ones from 9 inches to 2 feet 6 inches; the library walls 3 feet at the thinnest parts. The walls of the ground floor generally corresponded with the basement floor walls. A door way was wrong, but was discovered before they had advanced far, and was taken down, and rebuilt, by extra days' work, allowed to the contractor.

The walls on the ground floor corresponded with plans given me by Mr. Fuller, but these were altered plans, and did not correspond with the contract plans. They had been changed to admit of the heating and ventilating system. I had reason to complain of the contractors not doing their work properly. They were not bonding the walls, and putting mortar under the stones in the foundations. They did it right when I required them, and it is as I required it. The proper way to conduct the building of walls, is to build the cross walls at the same time as the exterior walls are built, so as to tie them, and when a stone wall is to be lined with brick, they should not be built at the same time, but the brick lining was not left out by my orders. It is a disputed point among architects, whether brick lining is best built with the stone wall, or afterwards. My opinion is that it is better built afterwards. When the inside bricks were built they were fair inside bricks; they have gone by exposure. It was intended to cover them properly the first winter, and it was the contractors duty to do it, but they were not properly covered, and the wet and frost caused them to give way on the ground floor walls. Some of the bricks used are not according to the specification; but bricks according to the specification, would have been injured by the exposure I speak of. The best bricks we ever got were from Three Rivers, and these gave way the first winter in the lining of the boiler house. I do not find the brick walls now much worse than they were the first winter. The brick work, is worse than when I left it, but the sum of $100 would repair all that is worse. If the permanent roof had been put on last winter, the injury to the brick work which I observe to have been done, would not have occurred; but that is the part which I say $100 would repair.

I do not know what became of the brick rejected by Mr. Morris; some was removed, I know. I omitted to mention that where breaks were shown for chimneys, it was cheaper

and easier for the contractor to make the whole wall solid, than to form the break; as the stone which came from the excavation, was lying at hand, in heaps in the way, and was rough. As far as I know, the foundation walls were built of stone taken from the excavation. The walls are of good masonry. I do not know who ordered the foundation of the main tower to be solid; but, as a duct runs through it, I suppose it would be cheaper for Mr. McGreevy to make it solid than to form and face the foundation up to the height of the duct. There is no need for the foundations being solid, or being wider than the plan showed. It would be proper in an earth foundation, not on a rock as this is. I have a plan of this main tower foundation, which I made at the time; it is put in, marked F. The masonry is solid to the outer line on this plan 42 ⋈ 44 feet. In my opinion all that was necessary was to have the foundation 3 or 4 inches thicker than the walls, as shown on the plan. All beyond this was useless and superfluous in my opinion, for the foundation was rock.

There are about 18 inches of hard pan found in all the east wing, but hardest at the west part of that wing. There was none, to my knowledge, any where else under the Parliament building. Although all the earth was not dug out under the building, I allowed in the measurement as if it had; for it was moved from apartment to apartment so often, instead of being removed, that I thought the labour equal to the excavating of the whole. I look at the plan of cross sections of the excavation for ducts; its own number XV; it is letter G, of exhibited plans. I now speak of the air duct outside the building and in front of it; it is excavated in earth and clay, in depths varying from nothing to 6 feet above the rock, but the earth has been taken out to the rock, and walls built 2 feet thick for the sides of the ducts, and there are cross walls up to the bottom of the duct 6 feet thick, about every 10 feet, to keep the walls out. This excavation was unnecessary; the foundation of the duct would have been good in the clay; it was solid enough in my opinion. The ducts on the west, and the three on the north are excavated from the rock I now speak of the one from the west. The general width is from 15 to 30 feet at top, 6 to 17 feet at bottom, and the average depth from 8 feet to 17 feet and a half; its length 396 feet. The rock was excavated unnecessarily wide in my opinion. The stone from the excavation was used in the work, and the additional width enabled the contractors to draw the rock out on a stone boat. There was, in my judgment, in the proportion of 16 to 13 of the material unnecessarilly removed in this air duct, or three sixteenths of it might have been left in. I speak of the duct from the north; its width on top is from 16 feet 6 inches to 21 feet; at bottom from 15 feet 6 inches to 18 feet; depth from 9 feet 3 inches to 10 feet 6 inches; length 80 feet. In my opinion, in this duct, the proportion of rock unnecessarily removed was three sixteenths. I speak of the duct from the north-east. Its width at top is from 15 feet to 17 feet, at bottom from 11 to 14 feet, depth from 7 feet 5 inches to 11 feet 9 inches, length 214 feet. In this, also, three sixteenths of the rock has been unnecessarily removed. I speak of the duct from the north-west; it is in the same proportion as the others. In measuring the masonry for the ducts, we measured the whole excavation, from the bottom to the top of the arch, and from this deducted the area of the duct openings. I speak of the east duct; it was half clay half rock, and was taken out the neat width. It was not so deep as the others, and there was no superfluous work upon it. The masonry was rubble to the bottom of the ducts, then picked ashlar, which we measured on the face; this was the mode of measurement in Ottawa and Kingston. I cannot speak of other places from my knowledge. This masonry was valued at 41 cents in the progress estimates. I do not know what was paid the workmen; its actual value was about 25 cents a foot, as I believe, measured on the face. I put in a true copy of the measurements of Mr. Morris, of work done for progress estimates, from the commencement of the work till the end of May, 1860, and my own measurements of the work for June and July, 1860, (Exhibit No. 15). I copied it from the book which was lost, so far as Mr. Morris made the entries, and in that lost book, my own measurements were entered. I made up all the progress estimates from June, 1860, till Mr. Bowes came, on the 1st June, 1861. The progress estimates were made correctly from my measurements so far as I know. I do not know how I measured the Nepean stone; but, as it was substituted for Ottawa stone as an extra, I should only measure the actual face of the Nepean facing. Its depth is about a foot; I do not know its value. I consider there is extra on the bond stone

in the towers. I measured the walls as I found them, and not as they ought to have been, with reference to the contract.

I was told to do so, as the estimates were but progress ones, and they could be corrected at the end of the year, but we have not had time to correct them, and I understood that Mr. Fuller corrected them at the time Mr. Page came. In Mr. Fuller's letter to me of the 1st June 1861, the errors he then spoke of, were the errors which had occured in the setting out of the walls. I understood him there were no other errors of any moment then. In the winter of 1860-61 we were making measurements for Mr. Page. Mr. Fuller first complained of errors, when the basement walls were to be set out. He did not complain before. He again complained of the ground floor walls.

We set them right as far as we could in the way I have stated. He did not complain that I remember of the extra thickness of the walls. I have marked on the plans in red figures, the thickness of the walls, as I now find them, and these walls are in excess of the proper contract wall in the proportion of about two to one. Mr. Morris instructed me as to the kind of work I was to get done. I had all my instructions from him till the 1st June 1861. None from the architects that I know of.

My instructions from Mr. Morris were to have proper bond in the Nepean stone, and rubble stone, and to see that the rubble work was properly bedded, and the walls filled; and I did so. Mr. Morris was taken frequently away from the work to do other things. There were not clerks of works sufficient to superintend the work at the beginning, it would have required the exclusive time of four on that building all the time. I was not much occupied in drawing plans, but I drew the plan XV, exhibit G, from which I have spoken. That plan fairly represents the work as it was, when it was made in the winter of 1860 61.

I made no plans except what related to my measurements during the time I was here The sections on the plan G, show as accurately as possible the width of the excavation, beyond the face of the Parliament building. They show also the position of the rock excavated. The sections of the ducts on the south side of the building as laid down on the G. plan, represent the walls to be finished in height to the bottom of the flagging. The brick work on the east side of the boiler house, in the tramway is bad, and ought not to have been passed; and I must have omitted to notice it, from its being covered with scaffolding. I cannot say positively that it was by my orders that the extra thickness of window jambs was made in the basement.

I estimated the price of the dressing of the stone for the ducts, at 25 cents per foot, from the fact that they were worked from the stone taken from the excavation, and were rough. After I got my orders to superintend the east part of the work, I laid out the cross wall east and west; on the east side of the corridor; on the Legislative Council side of the building; and the north and south wall on the east side of the corridor, also the north wall of the corridor, the walls round the Legislative Council room, and the walls north and south under the dining room; the walls running east and west on the west side of the corridor of the Legislative Assembly, and the walls south of the members' lobby, Legislative Assembly.

These last two were done by me for Larose. The thickness of the walls I measured, I have marked in red from actual measurement. I have looked at the Nepean facing stone since yesterday, and I was wrong in my statement then that they averaged twelve inches. They will not average more than eight inches deep on the bed of the wall. The toise of masonry here, is, I think, 72 feet; in Toronto it is 54 feet. There is no hard-pan in any measurements I made on the Parliament building. In the progress estimates, it was allowed for the covering of the ducts, in front of the Parliament building, for limestone flagging, at the rate of 75 cents a superficial foot.

The stone itself delivered was worth ninepence a foot. Mr. Fuller returned it in the progress estimate at 75 cents a foot. I consider its real value about 30 cents, including stone and labour.

(Signed) JOHN GRIST.

23rd AUGUST, 1862.

MEMBERS PRESENT :

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR, BOURGEAU.

ALEXANDER MACKENZIE, sworn.

I am a builder ; have been engaged in the business about 23 years. I have been engaged as superintendent, contractor, and architect on various buildings. I superintended the building of the locks of the St. Lawrence Canals and part of the fortifications at Kingston. I was contractor for, and built the county buildings for the counties of Essex and Lambton, the banking house of the Bank of Upper Canada at Sarnia, the central school house there, besides churches and private buildings. I furnished the plans and specifications for the county buildings and school house I have spoken of. I never had any difficulty of any kind in any of my contracts. I did tender for all the public buildings at Ottawa, and the Governor's residence. I spent about a month, assisted by six others, in examining the plans, and making out estimates for these buildings. I had two plumbers, three carpenters and two masons with me. I made a careful estimate of quantities, and I tendered to build the Parliament building, and the Departmental buildings for the sum of $801,500. This included fire-proofing on the Parliamentary block. I was at Ottawa when I took the quantities. I found the plans and specifications to guide me. My impression is that these laid on the table of the architects. The conditions on which the tenders would be received, and also a printed copy of the form of contract usually entered into by the Department of Public Works. I found these forms of tenders and schedules to be attached. I think it was stated in that paper, and it was distinctly intimated, that no tender would be received which was not accompanied by a schedule of prices. I have a copy of the schedules distributed on that occasion, the heading of which does not correspond with the heading of the schedule published in the blue book, page 83. The words "and also for extras" are omitted after the words "dispensed with", in the sixth line as printed in that book. The use of that schedule as being incorporated with the contract, is expressed by itself. It is for the purpose of estimating progress estimates, and fixing the prices for alterations, additions, or works dispensed with, and for fixing the price of extra work. It was to prevent the possibility of dispute, in making progress estimates, and in the values of additional and extra works. The amount of work done additional or extra being ascertained, the price was fixed by the schedule at which such work would be paid. The practice of having schedules is not common in this Province, but it is the almost universal rule with the Imperial Government. I do not know the practice of the Department of Public Works. With ordinary buildings it is the usual practice to place the valuation of extra work in the discretion of the architects. I say the schedule I put in with my tender represented in detail the bulk sum of my tender, and also the prices I expected to be paid for extra and additional work. The universal opinion of all those I conversed with in reference to these schedules agreed with mine. In my view of it, a tender without a schedule ought not to have been received. I took some pains to be informed of the system under which the Parliament buildings in England were constructed. The work was let in sections, eight in number. Three of these were let at bulk sums, but embodied in the contract were schedules on the same principle as in the case here. The rest were simple agreements that the work would be performed at the prices mentioned in the schedules attached to former contracts. I examined the sessional papers of the House of Commons on this subject, and I was unable to find, that in the course of inquiry, any instance had occurred of any deviation from the prices mentioned in the schedule. The estimate of Sir Charles Barry for certain works, was in round numbers £707,000. The contract price was £682,104. I considered Mr. McGreevy's con-

tract too low. My own was as low as it it could possibly have been done for in my judgment. Mr. McGreevy's bulk tender for the three buildings was $579,000. This did not include fire-proofing for the Departmental Buildings. His separate tenders for each building put the fire-proofing at $44,900 for the Parliamentary block, but he was allowed to add for fire-proofing to his bulk tender $48,310 for the departmental buildings. His tender thus supplemented was $627,310. Mine was $801,500, making the difference between his and mine $174,190. To mine should be added the fire-proofing of Departmental buildings. I did not know until the Parliament met, of any irregularity in his tender by the omission of the schedule, nor did I know how it was made, but I have no doubt the prices mentioned in the schedule were in excess of what the bulk sum represented rather than under. I consider the mode of cubing buildings of this class not a correct mode. It may do very well for common buildings.

The proper and reasonable precaution was to have got the architects or some competent persons to make out quantities of the work, and to apply the ordinary values to these quantities and thus establish the value of the building. If this had been done, it would have appeared that the appropriation did not warrant this extent of building. I have examined the buildings as they now are with a good deal of care. The general exterior masonry of all the buildings is good—some very good—and the stone cutting is generally well executed. A small proportion of the stones are on the cant. A large proportion of the internal masonry in the Parliament building is of a poor class. The Departmental buildings are better. The brick work on the Parliament building is of a very inferior class, and the quality of the bricks entirely unfit for a building of the kind. One bad thing about the buildings is the irregularity with which the walls have been raised, entirely destroying the bond between the brick lining and the stone walls, and between the division and exterior walls. A large proportion of the brick must necessarily be taken down before the work is resumed, as they have crumbled away. The work is better in the lower than in the upper portions. The work seems to have deteriorated as it advanced. The greater part of the bricks delivered on the ground, so far as I have been able to examine them, are certainly unfit for the building.

The brick work in the Departmental buildings is of a better class both as regards material and labour, although there, little care seems to have been taken to reject soft or bad brick, I think there is very little wall in the Departmental buildings in excess of the contract walls. In the Parliament building there is a very large excess of masonry in the foundation walls. In these walls generally there is an excess of from a few inches up to four feet. I saw a short wall six feet in excess, one of the walls I allude to is 100 feet long, and is about four feet in excess; I should infer that this arose from carelessness in laying out the work. In all the buildings, Parliamentary and Departmental, there is a remarkable excess of wall wherever chimney breaks occur in the walls. These walls are made the thickness of the chimney breasts all through; this causes a great excess of masonry. I think the buttresses of the Library ought to have been increased from what the plan shewed, but not to the extent they are. There is a very great waste in the foundations there.

The practice in laying out a building is, for the architects to establish a ground level and give a centre or base line from which to work. The contractor from that assumes the responsibility of laying out the works. I think it is the duty of the architect and his clerk of works, who should in all cases be the nominee of the architect, to see that the walls are in their proper place before the work is far advanced, and to be present to assist the contractor in giving all necessary information as the work proceeds. Whenever the contractor finds a difficulty, it is his duty to apply to the clerk of works or architect for information.

The duty of the clerk of works and architect is to see that the work is in its proper place, and if it is not, the contractor should put it so at his own expense. There would be no objection to foundation walls being thicker than necessary, at the instance of the contractor. The result, however, would lead to dispute as to whether this leave was given, and to what extent. I think two clerks of works were necessary when the Parliament building was laid out. Their duty is not to set out the works, but to see that they are set out correctly. In ordinary buildings the contractor has a plan given him In large buildings there is an office where the plans are kept open for the use of all who require reference

to them about the buildings. If the basement plans of these buildings lay in an office in this way, I think it was sufficient for a contractor. I think I should have had no difficulty in laying out the work from the plans of the basement and ground floor now shown me. The walls are figured, and the larger dimensions given, but the rooms should have been figured also. There could, however, have been no difficulty in laying out the buildings from the plans, which are clear and well got up,

The plan of Mr. Garth's heating and ventilating would add to the difficulty of laying out the foundations, but would not account for the errors I see. I now mention that there are many walls connected with the heating of unnecessary thickness. In the Departmental buildings, I find walls along the corridors, connected with one of a brick in thickness lying against them, where the same lining might better have formed part of the ordinary wall. I think the work for excavating and forming the air ducts external to the building could not properly have been let by contract to other parties while the other buildings were going on, but I can see no reason why they should not have been left. I think the carrying these ducts to the bank, was an injury instead of a benefit. I think the air could have been admitted close to the building. I have seen the work, and I have seen the plan showing the sections of that excavation The quantity excavated seems excessive; there seems to be two feet on each side too much. There is no difficulty in excavating limestone, and the rock in this hill is brittle, so that in blasting it, no very excessive quantities are likely to come out. An eighteen inch good common rubble wall, flush pointed with cement at the joints, would have been quite sufficient when the excavation was on rock. The cement would have prevented any dust from the disintegration of common mortar. Instead of an eighteen inch wall, I find solid masonry, averaging about four feet, between the ducts and the rock, and instead of a rubble wall flush pointed as I have described, I find pick-faced masonry.

I am acquainted with the value of pick-faced masonry such as I see on the ground; its value is 17 cents per foot measured on the face. The rule of measurement here, and over all Canada, is on the face, not beds and joints. In measuring the rubble work, this cut stone is included, which pays for its setting in the work. The 17 cents I mention as the price does not include the material. I came to Ottawa before I tendered, for the express purpose of examining the sites of the buildings, and the quarries in the neighbourhood. I saw that there were several inequalities in various directions, while the architects had assumed the ground as level. I got an idea of the site pretty accurately from a block plan I found here, and I took the levels and found there would be a large quantity of foundation work below the assumed level on the plans. Although the surface of the ground line could be taken very accurately, the depth of the rock could not be found without digging. I knew there would be a large quantity of masonry in the foundations; and as such masonry pays best, it enabled me to lower the general price of my tender considerably. For this I expected to be paid by my schedules of prices. I knew there would be a large quantity of rock on the ground, which could be made available for rubble work. I think it was a great mistake to assume a level line for the foundations; there should have been a profile made of the ground, and the depth of the rock ascertained by sinking test pits before exhibiting the plans, which should also have given a section of the strata of earth and rock, and so prevented any mistake. I think this error gave rise to a great part of the difficulty which has arisen, on account of the extraordinary interpretation given to the heading of the schedule.

I say that before contract plans were drawn, it was the duty of some one to ascertain correctly the real foundations, and draw the plans accordingly, or to have had the contract so drawn, as to have covered the work necessary in constructing the building without dispute. I can only say, that if the Deputy Commissioner of Public Works, the architects and all, join in saying the schedule did not apply to that, I, and all that I knew who tendered for the building, thought the schedule did.

— —

25th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

ALEXANDER MACKENZIE,—Examination continued.

I find it stated that in the excavation for the foundations and sewers for the Parliament building, according to Mr. Killaly's report, there are 1894 yards of hard-pan certified by the architects; if this were so it would have made a good foundation for all the walls; certainly for the interior walls. I find also from the same authority that in the foundations and the sewers of the western Departmental building 5570 yards of hard-pan, and I find in the eastern Departmental building 2396 yards hard-pan certified by the architects, and I say that wherever there was hard-pan it would have made a good foundation, but I have been unable to find any trace of it. The solid masonry in the tower was unnecessary. The foundations need not have been over nine inches beyond the size of basement wall. Solid masonry it not usually so good as piers properly built of the proper size. I estimated the value of rubble stone, at $5 on the ground, and for whatever rubble work the contractor was paid additional, the value of the stone he used should have been deducted, at the rate of $5 per toise. For all the purposes of the additional work, the contractor when paid for excavating the rock had no right to it. It was then quarried material, the property of the Government, and if he used it in his rubble or other work, for which he charged the Government full price, he ought to allow the Government the price of material. Looking at the rock from the ducts and the width of the excavation, I infer that the excessive width was for the purpose of getting the rock to enable the contractor more easily to get the material. It was from the excavation made for these ducts, that the material for building the ducts came. I see other stone in the drains chiefly. There is a difference in the wording of the specification for the Departmental buildings from the Parliament building.

In the specification for the Departmental buildings, quoins are not expressly mentioned but implied. In the Parliament building quoins are expressly mentioned. I so read the specification when I tendered. I now show in my estimate for the work the entry, and I so read the specification now. As the quoins are, in the Parliament building, they are not according to the specification, nor of the size. In the Departmental buildings, according to my opinion of the specification, they are as specified. As I understood the specification about relieving arches, they were to be half of red sandstone, half of sandstone from the neighbourhood. They are now of red sandstone, and so far, more expensive than the specification. I can speak of the different modes of measurement in Canada west. Rubble masonry is generally measured by the toise of 72 feet. By this mode all walls below 2 feet are assumed as 2 feet. Walls above 2 feet are cubed, calculated by the 72 feet toise. Rubble masonry is frequently measured by the cubic yard. In estimating for these buildings, I cubed the work, and calculated by the toise of 54 feet. I did not calculate the walls below 2 feet as 2 foot walls, for the specification precluded that mode of calculation as I read it. Every where in Canada, dressed and cut stone is measured on the face only, no beds or joints. In fine moulding on cut stone, the face is measured, and the girth of the moulding added, but in large mouldings the girth is measured with the face. In estimating for these buildings, I girthed the whole, not deeming them of so complicated a character, as to require the appliance of face and girth as in fine work, excepting the lower arches in the tower. I cannot apply a rule to carved bosses, springers and fine carving. Arched work, such as the ducts and drains, are measured on the soffit and the amount doubled, ordinarily. In arches of windows and external arches the soffit

and external face are measured. The bulk of the masonry in these buildings is under the ground floor line. This masonry I estimated and tendered to do for $3.50 per toise of 54 feet. In this I estimated to furnish the stone, but if I were paid for excavating the stone, and used it from the excavations, then I should have done the work at $2 a toise of 54 feet. The stone from the excavation which was fit for rubble work, was worth on the ground, as taken from the excavation, $5 per toise. The external walls are $4.25 per toise. This was what I calculated my tender upon. To the depth the plans show the foundation line, the stone from the excavation belonged, as I read the specification, to the contractor; under that line, I did not consider the stone from the excavation belonged to the contractor. For all that I have seen, I could have done the work at these prices, for all the additional work under the assumed line on the plans, indeed all the foundations and basement. The schedule is deficient in not having prices for the rubble work, in the different stories of the building stated. I did not suppose there would have been any extra mason work above the assumed line shown on the plans. The pick-faced work I see on the sides of the drains and ducts can be got worked for 12 to 13 cents per foot. I would double this to the contractor for profit and the stone. A considerable portion of this work I call rather dressed rubble, than pick-faced masonry. The stone was got from rough material, mostly from the excavations. In allowing 25 to 26 cents a foot for the face for this work, I include the stone. The division walls for the drains and ducts are worth 30 per cent more than I have stated for the sides. The skewback I should measure as part of the perpendicular wall. The pick-faced work on the boiler-houses, including material, is worth 35 cents to the contractor. The pick-faced stone prepared for the ducts, I value at 25 or 26 cents a foot on the face; the laying it is allowed for by measuring it as rubble work as I have stated. The value of the limestone flagging covering the air ducts, is 30 cents a foot in the work; this will allow a fair profit to the contractor. I had made arrangements to have Ohio stone delivered here, at 65 cents a cubic foot. I do not know what it cost the contractors. For rough bouchard work on Ohio stone, I would give 15 cents a foot; fine bouchard, 17 cents; rubbed do, 20 cents; sunk rubbed, 40 cents; chamfered, 40 cents; moulded, 60 cents; sunk circular, 55 cents; circular moulded, 80 cents. The quoins in the Departmental buildings, as they now stand, I should say were worth 17 cents a foot. In the Parliament building the quoins are not bush-hammered at all. The difference as they are and specified is about 4 cents a foot. All these prices are as they should be allowed the contractor in extra or additional work, and allow him a fair profit, and as I estimated them myself. I think the Nepean worse to dress than the limestone. I think the Nepean facing is about 8 inches in bed in the wall, though in the lower part of the walls, the stones seem to have larger beds. The stones in the lower parts of the walls in all the buildings are better than the upper. Earth excavation is worth 25 cents a yard. Hard-pan 60 to 80 cents, generally 60, but I have seen none here. Rock excavation, such as I see here, is worth for the first 5 feet 60 cents, next 5 feet 80 cents, third 5 feet $1.10, the fourth 5 feet $1.50, the fifth $2.00, and for the sixth $2.50 per cubic yard. This is the price I put upon the excavations as I find them. If they had been of the proper width they would have been worth from 20 to 25 per cent above those rates. When the regular price is allowed for the work, I never heard of centreing being allowed in such works as this. I estimated the loss in dressing Nepean stone in the ratio of 24 to 16. It appears to have been drawn from the quarry and dressed, and should have been dressed at the quarry. If such brick as the specification requires, there would be 18 to the cubic foot. The openings in the brick work are not measured in interior walls. In measuring rubble work, the ordinary openings of doors and windows are not deducted. Anything over an ordinary door of 8 feet, the value of material should be deducted to, say, two-fifths of the opening.

The difference in value between the Flemish bond, as specified for in the Departmental buildings, and the bond as I find it in the 13 inch walls, is 20 cents a thousand bricks in favour of the contractors. In the Parliament buildings the kind of bond used instead of that specified, enabled the contractor to use inferior brick in the lining and interior of the walls. I estimated the piping for draining as specified at $1155 on the Parliament building. On the Departmental buildings at $1460. I value the blue Ohio sandstone and the ordinary Ohio stone at the same price. The value of working into

steps, the blue stone, is 20 per cent over the other kind. I think the style of architecture to be inferred from the notice calling for competition designs, is so general, with the exception of the term "entablature," applied only to the classic style, that no architect could form an opinion what style was required. It was a mere matter of opinion. I think there is no material difference in their adaptation to climate from the classic style, or a modification of it, which I should have preferred to this style. I think the Gothic style is always wanting in light for offices, and these will be found deficient in this respect. I think Nepean stone is more durable than limestone. I am unable to give a matured opinion as to the system of heating and ventilating. I incline to the opinion, it is a good one, but its expense was entirely unwarranted in view of the appropriation for these buildings. I have already stated my opinion to be, there was no need for carrying the ducts beyond the walls, and none for facing them with dressed stone. I think a great deal of expense might have been saved by using the chimney flues and all the flues for the hot air system also. I forgot to mention before, that the style of these buildings is objectionable from the small projection of the cornice. The lower walls will be wet, and constantly injured by water and ice falling upon them. The mortar is already out on some parts of the Departmental buildings. I estimated the iron girders at $80 per ton. I had made an arrangement with an English house to furnish them at 17s 6d per cwt. here. Cement concrete, I value at $3 per yard, common at $2.50, rough at $2. These prices will pay for the contractors a profit. Any concrete I have seen done here is useless, having no bond. I have a poor opinion of gravel roofs, especially a deck roof over slate. They are totally unfit for the buildings. The slating is pretty good. The cornice on the Parliament building has as much bedding on the wall as is specified; but it ought to be otherwise bonded, to strengthen the wall by having occasional through stones; it seems to have drawn the wall, or has not been properly set.

The deafening boards in the west wing are right, those in the others are common stuff. There was no difficulty in getting fire brick for the safe and record rooms as specified; they are built of rubble masonry with Nepean stone; they are not arched as specified but have iron joists; the difference in the value will be very great. There would have been 80,000 fire bricks required in the eastern Departmental Building, and 65,000 in the western: they were worth, on the ground, $40 a thousand; the Toronto brick would be worth $23 a thousand. Those used in lieu of Toronto brick are worth $. The rubble work used instead of the brickwork is worth $2,200. The work, as specified, would have been worth $6,525, making a difference of $4,325 to the contractor on both Departmental Buildings. I think it the duty of architects to supervise all measurements, no matter who takes them, to see that they are correct, and hold themselves responsible for the perfect execution of the works according to the plans and specifications; I think their duty, here and in England, is to measure the work; I think the duty of the architect is to stand between the proprietor and the contractor, and to see that no injury is done to either party. As I understand it, Sir Charles Barry engaged the measurers who measured the Parliament Buildings in England, and paid them, but I cannot speak positively. I refer to the duties of the architects here, as mentioned in the letter of the Department, 10th September, 1859, (Blue Book, pages 131 and 134.) I see the line pointing out the part of the Parliament Building superintended by Mr. Morris. I think the walls are more in accordance with the contract than in the other parts of the building; a large number of his walls are right, and not in excess, but some are wrong, both as to place and excess of wall. I do not know what the value of work was during the time the buildings were going on in Ottawa.

26th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

ALEXANDER MACKENZIE,—Examination continued.

I think it was imprudent to contract for the Parliament Buildings until the plans for heating and ventilating had been matured and incorporated with the plans of the buildings; there seemed to have been undue haste in all the preliminary preparations. I omitted to mention that the prices for masonry increase in the different stories of a building; from the ground line to the first floor joists, rubble masonry would be worth $5.50, above this $7.00 per toise; the value of brickwork all through the buildings I estimated at $11.25 per thousand, measured in the walls. There was a good deal of difficulty in getting brick; I estimated it higher on this account. The chases for pipes for water, gas, and bells, were to have been made in the walls by the contractor; none have been made; this will cause great expense hereafter in making these chases, and in making good the walls; I should say $4,000, and over that sum. The cresting will ornament the buildings, but it will keep the snow on the flat portion of the roof, though not to an injurious extent. I did not like the gutters on the plan; the buildings look better without them, but the due protection of the walls below seems to require them. I do not think the buildings are so perfectly fire-proof as they would have been if arched with brick from one iron beam to the other. The corbelling over the walls is not proper work, each wall should stand fairly on the one below it; I saw one built on the iron joists. The Ohio stone is the best that could be got anywhere, and is the best adapted for curved work, of any I know. The bosses at the corners will be destroyed by the water from the roof. I think the buildings are properly placed in regard to the ground level of each. In this respect they are placed with due regard to economy, but if the western building had been two feet higher from the ground it would have been better and saved rock excavation; I think the saving in expense would have been considerable by adopting the higher level.

I think the ice and snow from the roof of the two chambers will break the skylights in the roof above the corridors and wardrobes. The circular staircases will be rather dark, and so will the corridors in front of the Legislative Council and Legislative Assembly chambers; I think these chambers will be sufficiently lighted. The members will have no opportunity of looking out at the windows. They will have the pure light from above through the skylight.

(Signed,) ALEXANDER MACKENZIE.

THOMAS STENT, further examined:

The first time I heard of the being extra was before Mr. Page, I think. We did not at that time allow it as extra, nor until Mr. Killaly allowed it, although it was frequently urged as extra, after Mr. Page's visit. I am positive that Mr. Keefer, in directing us to make the schedule to be attached to Mr. McGreevy's contract, after his tender had been received, told us the schedule was to apply to progress estimates only, and not to extra or additional work. We used the printed heading unintentionally, which made it apply to all works as in the other tenders.

From the first, we understood that the extra and additional work was not to be paid for by that schedule, and we never applied it to such work, but to progress estimates only. There is hardpan in the south front of the eastern Departmental building. In the western Departmental building there is no hard-pan in the strict sense, but clay and boulder excavation, as difficult to excavate as hard-pan, and so classed. Frozen ground was estimated as hard-pan ; it would have been better to have stated the fact as it was, but in point of expense it was about the same. I was always of opinion that the appointment of the clerk of works independent of the architect made them all feel that they were not bound to obey their orders, but exercise their own judgments.

This was vexatious always. Besides the instance I have spoken of, we sent through Mr. Morris to the contractors, two letters, which on reading he returned, saying they did not agree with his views. Upon this we referred the matter to Mr. Page, who agreed with us, that the letters should be sent as they were, and they were so sent. The clerks of works were competent, but their tenure of office was inconsistent with proper subordination. In the spring of 1861, the excavation for the sewer of the eastern Departmental building had become, in fact, filled with ice and debris from the rock on the sides. The contractors wished to be allowed to remove it, to go on with the rock excavation earlier, as an extra, which we refused, because in a week or two the ice would thaw. We heard no more of it till the end of the month, when in a day bill for extra work, several hundred dollars was sent in for this very work, and on enquiry we were told that Mr. Morris, in contravention of our direction, had instructed Mr. Hutchison, the under clerk of the works, to have it done, and actually wrote the order in Hutchison's book. We refused to allow the work. As regards the quoins in the Departmental Buildings, we had no doubt but that they were not extra; but a doubt was raised from the fact, that they are expressly spoken of in the mason work, which was to have been lime stone, but only impliedly specified as among the dressings of the building.

If they were to have been limestone, they are Ohio stone, and so far as the stone is concerned, were contended for as extra, and Mr. Killaly allowed it as such.

(Signed,) THOMAS STENT.

THOMAS STEWART, sworn:

I am a Builder, have been engaged in the business in Canada for 19 years; 17 years in Kingston, 2 in Ottawa. I built the masonry of the new gaol, and a school house, or chapel of the church of England, in Sussex Street. I am acquainted with the price of work in Ottawa and Kingston, and of the modes of measurement in both places. In measuring ashlar in both cities, the face is measured only. The term ashlar applies to allcut stone. In rubble work the standard thickness of wall is two feet, the excess beyond two feet is cubed, and the toise in all these cases is 72 cubic feet. If rubble is faced with ashlar, the ashlar is measured with the rubble, as a general rule, but sometimes it is not so measured. Ohio stone is measured just in the same way as limestone. I know no difference in the mode of measurement between them. The price of Ohio stone varies with the difference of freight from 55 to 65 cents per cubic foot, laid down in Ottawa. I bought a few hundred feet from Mr. McGreevy, and paid him for it at 75 cents a foot. I think the rule in measuring cut stone is to girth the mouldings, and if fine and intricate, add to the price, but in no case measure bed or joint. I never heard of this mode of measurement. I have seen the pick-faced work in the ducts and drains. I have paid for such work, but broader bedded, 12½ to 20 cents per foot for the workmanship. This is not wide bedded, and can be got done for about 12½ cents per foot for the workmanship, which, with labour and profit, I put at 18 cents, to which add value of material 15 cents, if Gloucester stone, making in all 33 cents. The other 12 cents making in all 30 cents per foot. Seventy-five per cent of the material in the Parliament building is of the rock from the excavation, and 25 per cent of it Gloucester stone, and stone of as good quality for the

purpose. Fifty per cent of the Departmental buildings from Gloucester, and fifty per cent from the excavation. In the boiler houses, the labour and profit on the stone, are worth 27 cents, the material included, 37 cents a foot. The inverted arch work in the drains, I value at 27 cents, the relieving arches 35 cents, including material. The skewbacks should be measured as wall, and in the narrowed work, the price of the skewbacks should be 27 cents per foot on the face. All this work is measured on the face only. I value the Nepean stone on the ground here, at 17 cents a cubic foot; in the wall, on a 9 or 10 inch bed, 27 cents. In the winter a team will drag 40 feet on an average per day. Plenty of teams can be got at 12s. 6d. per day, to which I would add for profit 20 per cent. The stone at the quarry is worth per toise of 216 feet, $12.00. I think a toise of stone would face 216 feet of the wall. Ottawa stone in the wall as originally specified would not be worth more than 12½ cents, the difference 14½ cents. The toise of 54 feet of rubble masonry in the foundations, is worth $3.78. In the first floor $4.58, second floor $5.13, upper floor $5.43, and in the upper part of the towers after the fourth story, add $1.00 per toise for every additional ten feet. Earth excavation is worth for the first 5 feet 20 cents, second 5 feet 25 cents, third 5 feet 35 cents, fourth 5 feet 50 cents, per cubic yard. Rock excavation for the first 5 feet, is 80 cents, second 5 feet $1.00, third 5 feet $1.50, fourth 5 feet $2.00, fifth 5 feet $3.00 sixth 5 feet $4.20, per cubic yard. This includes the removal of it. Such of it as was fit for ducts and drains is worth 10 cents a foot for rubble masonry, $3.75 per toise of 216 feet, but in such a place there would be a waste of from 35 to 40 per cent. The difference in price between Ohio and limestone for quoins would be 60 cents, or 45 cents per cubic foot. The price for labour for cutting and rubbing Ohio stone per foot, measured on the face, only 15 cents, sunk faced 21½ cents, plain faced circular 28 cents, sunk faced 44 cents To this I would add to the contractor 20 per cent for profit. The price of labour on the Arnprior marble, is three times the prices of the above, for the same classes of work. The material itself is worth 60 to 65 cents per foot. If brought in summer it would cost $1.10 per foot. During the progress of these buildings, the wages of bricklayers were from $1.30 to $1.75 per day. Good labourers from 75 to 90 cents. Quarry-men 80 cents to $1.10. Masons from $1.30 to $1.60. Good setters $1.80. Stone cutters $1.50 to $1.75. Carpenters and Joiners $1.00 to $1.75 per day. Teams $2.25 on the average, but for a considerable number $2.50 per day for such as were used on this work. For taking back earth for fitting and running 30 cents per yard. I tendered for the buildings, but at much lower rates than some of these. I intended to do all the extra work at the rates of my schedule, but they were higher than the bulk sum of my tender warranted. The straight moulded work as it is in the buildings, is worth 70 cents a foot. Circular moulded $1.10. The straight stone work on the entrance to the main tower in the Parliament building is 95 cents. The circular moulded work, $1.25. In the Departmental buildings I estimate the work the same. The cutting is admirably well done on all the buildings, and would be creditable anywhere. The chamfered work on the window and door dressings, I should count as moulded work, circular work on the windows the same. This is a good full price, and includes a profit of 20 per cent to the contractor. Chiselled stone work is worth 3 cents a foot less than rubbed work. Fine drove chiselled work is worth the same as rubbed work.

The cut stone on the top of the plinth of the Parliament Building is worth 27 cents a foot including profit. The work on square quoins 17 cents; splayed quoins 20 cents; jambs measured on the reveal and face; sunken and chamfered work taken on the same girth 25 cents, which includes profit. The base in the Departmental Buildings is Brockville stone, 33 cents a foot; the work is of a very good description. Quoins above base, square Ohio stone 18 cents. The splay is taken into account in the prices I have given. Splayed quoins above base 30 cents; jambs of basement doors and windows, Brockville stone, 33 cent.

When the stone is Ohio, the price should be 8 cents a foot less. All these prices include a profit of 20 per cent to the Contractor. In measuring brickwork, the openings are deducted, but I considered it unfair, and think that half ought to be allowed, unless the opening exceeds 10 feet, and then the whole should be deducted. This is a fair compensation for waste and materials. The general rule is to exclude openings. I value the

brickwork in the Parliament Building as it is, at $11.00 a thousand; in the De partments Buildings $13.00. I have added a dollar for better material, and one for better workmanship in the Departmental Buildings.

On the west side of the east tower of the Parliament Building I find there is a stratum of clay and gravel of about 6 inches deep, next to the rock, above which is sand. This stratum is not hard pan, but 15 cents a yard extra should be allowed for it. I think the slates on the ground are equal to the specification.

In my valuing Nepean stone in the face of the wall at 27 cents, I include 2 cents for pointing.

(Signed,) JAMES STEWART.

27th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN.

JOSEPH SHEARD, VICTOR BOURGEAU.

CHARLES GARTH, sworn,

I am the contractor for heating and ventilating the buildings. On the 12th November, 1859, I asked Mr. Keefer if the heating and ventilating was to be included in the building contract; he said no, it was to be separate and would soon be advertised. On the 14th November I saw the advertisement, and sent my agent to copy the plans of the buildings, then lying in the office of the Department of Public Works for intending contractors. After getting such copies as were necessary for my information, I proceeded to make plans and specifications for heating and ventilating, to accompany my intended tender for the work.

On the 23rd December, by arrangement, I met Mr. Keefer at Brockville, with my plans so far as they were then advanced, to get from him such information as I then required. It was, first, whether the engine room could be lowered ten feet below the basement floors; he informed me it could, and the excavation was to be done by the Department. Second, whether the walls could be altered in the basement, and warm air vaults made; he answered they could, so far as it did not interfere with the rooms. Third, whether warm air and ventilating flues could be made in the walls, and the necessary recesses for coils and registers; he said the contractors were to do this. Fourth, Whether I could have some of the rooms in the basement; he said no. Fifth, whether the basement rooms were to be heated; he answered yes. Sixth, whether the arrangement for ventilation which the architects had made could be changed without injuring the work and causing trouble with the contractors for the buildings; he said they could, as detailed drawings were to be furnished. Seventh, how many ventilation flues there were, and whether they could be altered, if required, to suit the ideas of the contractor for heating and ventilating; he answered they could. Eighth, whether in the parts of the basement marked "No basement" there could be vaults got, and at whose expense; he said there could, at the expense of the Department. And lastly, whether the architects had not arranged the buildings to be warmed in some particular way; he said no, I was not to mind what I saw on the plan, but to carry out my own idea so as not to interfere with the buildings too much; he said the contractor who interfered the least with the building would have the chance of preference.

He said he would send me the specifications of the buildings, and some tracings which my agent had not got, and I received them about the 31st, with a letter from the Department of the 30th December, 1859. (Exhibit No. 16.) I had no further communication from the Department till I handed in my tender of the 16th January, 1860. During the week following I was called in on two or three occasions before Mr. Keefer and Mr. Fuller to give explanations, which I gave. I heard no more of it till I saw a notice in a Quebec paper that the contract had been awarded to me. I saw Mr. Keefer and asked if I was to have the contract; he took me to Mr. Rose, the Commissioner, who verbally informed me I should have it, on condition that I should visit Washington to see the work there, as such was the wish of the Governor General, which I proceeded to do as soon as I could leave.

Immediately after, I had an interview with Mr. Keefer, in his office, and he told me I must go at once to Ottawa with my plans, which he then returned me, to mature them with the architects, and the official notice would be sent to me there. Soon after my arrival in Ottawa I received from the Department the letter of the 28th January, 1860. (Exhibit, No. 17.) I was engaged from the 1st to the 10th February in adapting and arranging the plans with the architects and Mr. Morris, the superintendent, so that the work could be proceeded with. I took the plans to Montreal with me, and as soon as I could get the altered tracings ready, and during the remaining part of February and the month of March, I sent them to Ottawa that the work might proceed. On the 6th April, 1860, I got a telegram from Mr. Keefer, saying he would "meet me at Ottawa on Tuesday next," and asking me "to go up on Monday, if I could." I went there on the day appointed and remained till the 12th. I met Mr. Keefer, all the architects, and Mr. Morris. The plans were discussed and adopted with some slight alterations.

The plans were adopted, and nothing left to prevent the works going on, of which I was aware. I requested that as the responsibility of the system of heating and ventilating was on me, I should have in some way the superintendence of the building of the ventilating ducts and flues. I said it would take a man his whole time to see that the ducts and flues were built according to my plan, and I proposed to appoint a person in whom I had confidence, and whom the Government should pay, but who should be under the architects, to superintend the work. They all agreed such a person was necessary, but the appointment should not proceed from me. I stated, if they would appoint a person I approved, I should be satisfied, and it was agreed to.

This appointment was never made, and its consequence may be that the Department will suffer expense and inconvenience, before the work is done. It was at this time, I think, the question of the material of which the ducts were to be made came up. My plans showed brick neatly pointed; it was stated that good brick could not be got, and the architects preferred stone. I said I had no objection if the surface was smooth, as pointed brick would have made it, but there was a long discussion upon it. It was stated then that there would be walls over the ducts in the Library, and brick would not be safe, I think. It was then understood that, for the time being, the clerks of works should superintend the building of the ducts and flues, but I understood the superintendent I had required would be appointed within a few days.

It was then agreed that, as soon as the slight alterations then agreed upon were made in the plans, complete tracings of them should be sent to Quebec and Ottawa, which was done by me on the 30th April. In the beginning of May I left for Washington, and during the month of May examined all the public buildings furnished with the heating and ventilating system, in New York, Philadelphia and Washington. In New York I met Mr. Nason of the firm of Nason, Dodge and Co., who are engaged in this business, and have much experience, and who constructed the heating and ventilating system in the capitol, patent office, and President's house, in Washington. To him I submitted my plans, and he approved of them. I met at Washington Mr. Walters, the official architect of the Government, an amateur in the heating and ventilating system, of much experience. To him I submitted my plans, and he approved of them. I did the same to Mr. Morse, connected with some of the heating and ventilating systems in public buildings in New York, and he approved of them. I inspected with great care the systems in use in the public buildings in Washington, where the fan is used instead of the external ducts, and

having considered all, I returned, satisfied that my plan was as perfect as all the experience hitherto obtained could make it.

The objection to the fan system is the draughts it causes. On its first introduction into the Legislature Chambers in the capital, it was introduced under the risers of the steps, but the draughts were annoying to the members. Next, a register was placed near every member's seat, and at his own control, but this was objected to for the same reason. Lastly it was introduced by hopper openings in the walls, but this did not satisfy those in the galleries. But by dispensing with the fan, and having the long ducts, I expect the air to come in so gradually as not to be disagreeable, for I have provided for the exit of the air, which was not properly provided for in the places I have mentioned, but rather forced in and blown about without proper means of escape. At Washington I learned that forcing the cold air against the coils in frosty weather was apt to freeze them, and I found the same difficulty myself in the Parliament Buildings at Quebec, but by bringing the air through long under ground ducts, I anticipate its being so moderated in temperature as not to freeze the coils.

The new wing of the Montreal gaol is heated on my system without fans, and there the greatest care is required to prevent the coils from freezing in very cold weather; for the lower coil is nearest, and is less heated than the upper one. In that building the air from the outside goes through the building about 24 feet before it comes in contact with the coil. To prevent this freezing, by modifying the temperature of the air in its passage through the long ducts, I suggested that the ducts should be long, as they are found. It was a matter of discussion between Mr. Keefer, the architects, Mr. Morris, and myself, whether the long ducts, or merely shafts near the buildings, were the best. I was aware of the order to construct three in rear of the Library, but I was not aware of the order for the rest, although in my visits I saw them in course of construction. Arrangements have been made for the introduction of fans for the Legislature Chambers, if they are found necessary; but, if necessary, they are to be put in at the expense of the Government. I am responsible for the system working well, provided it is carried out in its completeness on my plan, and I have no doubt of it.

I did not suggest cut stone masonry for the ducts, nor require it. Another reason for the long ducts is an anticipated saving of fuel, by the air being modified in its temperature, but the principal reason for lowering the boiler house, is that the return water would be carried back to the boilers at a higher temperature, and thus saving pumps, as has hitherto been the practice, and saving fuel, through the water being warmed in its return through the pipes into the boilers. Another reason for lowering the boilers is, that if built on the ground in the court, it would have taken light from the rooms, and it was objectionable to have the boiler under the building. The reason for there being so many ducts in the building is, to prevent the inconvenience that arises from the wind blowing in different directions, for by a system of slides the engineer in charge can stop or open as many as are required in any direction about the building.

I think, on my first visit to Ottawa after my return from Washington in the begining of June, 1860, in looking over the buildings to see their progress, I observed fine cut ashlar work in the cold air duct leading through the space under the Library. I drew the attention of Mr. Morris to it and said it was more expensive work than the thing required, and that I thought there might be difficulty with the Department on account of the expense. He answered the work was to be first class. I then asked if estimates of the extras were sent in monthly. He said estimates were sent in monthly showing the extra over the contract work. On receiving this answer, supposing he was the superintendent for the Government, as he appeared to be, I took no further notice of it. I said it was my opinion, the sum appropriated would not cover the contract and extras then going on. He thought differently. I spoke to Mr. Fuller, and he agreed it was not necessary, and if I did not object it should be discontinued, and it was discontinued from the fine to the pick faced, and I meddled no more with the work in any way, until I received a letter from Mr. Page dated the 7th February, 1861. (See Blue Book pages 236 and 246.) All this time my contract remained unsigned, and I had been delivering material and proceeding with my contract. About the 17th October, I received a letter from the De-

partment dated 16th October, 1860, No. 34,124, desiring me to meet the architects in Ottawa, to arrange a meeting at the office of the Department at an early date to agree upon and draw up a specification for the contract for heating and ventilating the building in accordance with the plans agreed upon and the tenders and conditions approved by Order in Council, and informing me that this specification was necessary to enable the Department to have the contract executed, and that no money could be paid to me for work until my contract was signed, There was an arrangement made, and I and the architects went to Quebec but missed seeing Mr. Keefer, and he arranged a meeting to take place at Ottawa, and we all met there. From the 5th to the 8th November, 1860, the specification was discussed between Mr. Keefer, the architects, and myself, and sometimes Mr. Morris, and finally approved of and signed by the architects.

It is published in the blue book, from pages 182 to 194. I did not insist at that meeting that pick-faced masonry should be used; my specification says "smooth inside the ducts and flues." I was not competent to judge of the style of work; I left it to them. The specifications, as approved were taken to Quebec, and I received a letter dated the 3rd January 1861, from the department enclosing a draft of my contract which I took to Quebec, and it was modified, engrossed, and signed on the 12th January 1861. (See blue book, pages 167 to 195.)

I was in Ottawa from the 18th to the 26th January, giving Mr. Page any information he required respecting the heating apparatus. Afterwards the correspondence took place between us respecting the ducts. (See blue book, pages 240 and 241.) I assented to rubble masonry in the ducts by their being larger, and having cement on the joints. I never was in any way consulted by any officer of the Department as to the expense of my system of heating and ventilating. I had a letter from the Department dated 27th August 1861, ordering extra work to about $5,300. a part of which I prepared. But I had another letter of the Department dated 28th September telling me my works were suspended, and I forbore to go on. After the work was suspended, I waited for three days to see Mr. Killaly, but he sent me word he did not require me then, and if he did he would send for me. I left word by my agent to see him, and learn if I was required, but I was not.

28th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C. CHAIRMAN.

JOSEPH SHEARD, VICTOR BOURGEAU.

CHARLES GARTH, further examined:

I wished to see Mr. Killaly particularly as to the protection of my works, but I could not see him; they were left just as they were, so far as I knew. I object to the statement of Mr. Killaly in answer to this question, No. 18, in his examination before the Legislative Council, and in his answer to the question No. 45. He says, in this latter answer, which is a stronger reiteration of the first, "the defect in the supervision was, that Garth, to fulfil his contract, assumed control over the work, and much interference with the works arose in consequence." To this, I say, that I never assumed any control whatever; all I did was, in consultation with the architects, Mr. Keefer, and Morris, to have my plans adapted to the buildings; but from the time they were settled, I never caused a single deviation or assumed any control whatever.

In February and April, 1860, my plans for the ducts were considered and settled upon. I never offered any suggestion except when I was referred to by the architects. My contract was not signed till the 12th January, 1861. I drew my original plans with reference to the requirements of the buildings as well as I could. My flues went through no place which appeared to me improper; but the reason of my meeting Mr. Keefer, the architects, and Mr. Morris, was to adapt them to the building, which was done, and I had nothing further to do with it, except in consultation with them.

(Signed,) CHARLES GARTH.

JOHN MORRIS, further examined:

The measurements I took from the commencement of the work, till they were taken by Grist, I think were correct. I did direct Mr. Grist to measure the stone from the excavation as rubble stone delivered on the ground, and I did so measure and return it myself in the monthly progress estimates; I do not know whether the architects knew it, but this was returned in the monthly estimates; and the book of quantities, if they asked for it, was before them when the progress estimates were made.

I put a mark on the Library wall which is there yet. All under that line, which is five feet below the ground line shown on the plan of the Parliament building, is extra. The contractor was bound to excavate two feet over the whole surface of the building whether rock or not. All below that was extra; but we measured all the excavation, and returned it. This is what we intended to put right in winter, but did not. What we intended to do, if we had had the opportunity, was to ascertain the whole excavation, and from it deduct the first two feet, which the contract bound the contractor to do, and return the rest as extra.

This ought yet to be done. The matter was taken from our hands by Mr. Page and the architects, so we never did it. I cannot account for the extra thickness of the walls, except that I think it was advantageous to Mr. McGreevy to use heavy stuff, although in the towers there was room enough to use it without thickening the walls. All the air ducts for the Parliament building were excavated the first summer, excepting the ducts from the Legislative Chambers, and the portion of the duct running east from the building. The excavation for the eastern Departmental building, and two thirds of the excavation of the ducts, external to the building, were done the first year. On the western Departmental building, all the excavation was done on the front towards Wellington street, and the external drain was about two thirds done the first year. As many men worked in all the excavation as could work. The main object in pushing the excavation was to drain the building, and it was important to have the blasting done before the walls were built, but it furnished rubble stone to the contractor on the spot for the use of the building. I found there was delivered from other quarries in January 1860, 204 quarry toises of rubble stone, but in this month there was no rock excavation. The next month there was delivered 443 quarry toises, but the rest of the rubble stone came from the excavation. I returned no hard-pan. I never saw any on the Barrack hill; but there was found under the east wing of the Parliament building, and in the greater part of the front of the eastern Departmental building, clay and gravel. There was, I should say from memory, 533 yards in the Parliament building, and I returned it as clay, but it was worth 10 cents a yard more than ordinary clay. In the eastern Departmental building I cannot give the quantity, but Mr. Hutchison can tell. There was none in the western block, but there were large boulders which could not be removed without blasting.

I instructed Mr. Grist, the first month he came, to measure the walls as he found them, but afterwards told him not to measure their increased thickness; but he did measure them, and they were returned contrary to my instructions. The rubble stone from the excavation was estimated at 87 cents per toise of 54 feet, or at the rate of $3.48

per quarry toise. I recollect no important delay in detailed drawings for the Parliament building, but there was delay in the Departmental buildings, and the men were kept waiting. The letter book will show the correspondence, and the architects book when they were delivered. The instance referred to by Mr. Stent of disobeying his orders, with reference to the delivery of two letters to the contractors, occurred in this way :—Mr. Hutchison had gone to the architects for some information, which they communicated in open letters addressed to the contractors, which Hutchison brought to me to be copied, but saying he could not understand the directions contained in them, and asked me to explain them. I could not understand them, and I suggested that the best way would be to take them back to the architects, to make them explicit. We did so, and they were offended ; but I suggested the taking them back in a friendly spirit, for I could not understand their meaning, nor could Hutchison. The other instance, about the removal of the frozen ice and *debris* in the ducts, in the spring of 1861, occurred in this way :—It was important that a beginning should be made in the spring.

29th AUGUST, 1862.

MEMBERS PRESENT :

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

JOHN MORRIS, further examined :

Mr. Fuller had issued an order directing the removal of it, to a limited extent, in the Parliament building. The contractor and his foreman had been in the habit of consulting me as to what was best to be done, and I had freely given my opinion, always with the understanding that the architects should first approve of it. In this instance I agreed with them that a beginning should be made in both buildings, but I objected to their beginning at the extremities, but was willing they should begin in a limited space near the boiler houses. They commenced without first getting the sanction of the architects, and went farther than I approved, for the purpose of using a derrick beyond the curve, but I never heard of it till the monthly estimates were made. I did not intend to do anything, and in fact did nothing, in opposition to the architects, or as acting on my own responsibility on the occasion. The contractors did work which was charged in the time-bill, of which I never heard, at another part of the works. The extent of the work I thought ought to be done, would occupy six men three or four days on each block. The contract prices did not pay the contractors, but the prices fixed by the architects were supposed to do so, but no estimate was final in this respect. The plans were in a room open to all concerned in the buildings. I never heard Mr. McGreevy complain that the plans did not sufficiently show what the work was to be, but I heard him say he thought the architects ought to have furnished him with a set of plans. I had no time to attend to the estimates after Mr. Grist came. The assistant clerks of works, after their appointment, measured their own portion of the work, and from their measurements the monthly estimate was made. I was aware the architects had never made any measurements for the monthly estimates. They did not at first, but subsequently told me, it was no part of their duty.

The measurements of the first year for progress estimates and for extra work were not accurate, but approximate, except as to the depth of the excavation and foundation, and they were not intended to bind either the Government or contractors, but were subject to a re-measurement.

In the measurements I and my assistants took for the monthly estimates, I certified only to their approximate correctness. The estimate made in February, 1861, was made between Mr. Page and the architects. I signed it *pro forma* only. I knew nothing about it but my signature was required to give it effect, and I had no doubt of its correctness, as it was made under the supervision of a superintendent of the Department. I knew there were deductions made, which I believe were on account of the excess in the thickness of the wall. Referring to the map H, which contains the levels of the ground referred to the lock sill, on the second row of figures from the south side is the elevation marked 138.8. The ground line of the eastern Departmental building is 3 feet 8 inches above this level, and 6 feet 8 inches above the ground as it originally stood, at the south west angle of the building. The boiler houses were excavated 10 feet lower than the lowest floor on the north side of the building. The original sewers were to drain the basement, but when the boiler houses were lowered, the sewers had to be lowered ten feet. This increased in great proportion the size and expense of the rock excavation and masonry; for, at the given depth, to drain the basement, the bottom of the sewer was of a certain width; but in order to make it ten feet deeper, it had to be so much wider on the top and all the way down thus:

and the lower excavations were done at a rate increasing every five feet. The masonry was in the same proportion. As I laid out the excavation for the ducts, they were of such a width as would admit only of the masonry and the ducts. I find they are much wider now, and I cannot account for the difference. The hot air flues in the original plans were adapted to Mr. Garth's plan,—some smaller, some larger. His plan was adopted, and the work on the original ones was intended to be deducted from the work on he actual ones, and the difference extra.

I saw the schedule which Mr. McGreevy sent in, which he refers to in his letter to the Commissioner of Public Works. It was the printed form filled up, but Mr. Stent, Mr. Fuller and myself saw that the prices in the schedule did not correspond with the bulk sum of his contract, and that if the estimate had been made out and paid upon it, the whole of his contract money would have been drawn before the work could have been half finished. This we pointed out to Mr. Keefer, who then directed us to make such a schedule as would apply to his contract. Mr. Fuller was present when we began, but he left Mr. Stent and I to make it out; and we made it in the way I have already stated; and we made a schedule the same day for the Departmental buildings, and on the same direction and in the same way. I have no doubt the schedules we made fairly represented the bulk sum of the contract for the Parliament building and probably over. We had not the quantities of it, but Mr. Stent had the quantities of the eastern Departmental building; and the schedule we made for the Departmental buildings, applied to these quantities, came near the bulk sum of the contract for that.

I now look at the original contract between the Commissioner of Public Works and Mr. McGreevy. I know Mr. McGreevy's signature; it is his name and signature I see before the seal on the contract. It is his name and signature I now see to the specification and schedule attached to the contract—his name and signature is at the top and end of the schedule of prices. It is the printed form as exhibited to intending tenderers, and is the schedule prepared by Mr. Stent and myself. The figures are mine under it, and it is the one Mr. Keefer directed to be made in the way I have spoken. As the specifications were exhibited to intending contractors, there were conditions attached to them, lithographed as the specification was, and forming part of it. These are not attached to the specification I now see attached to the contract, but I put in lithographed copies of these conditions; they are contained in exhibit No. 2, of which I formerly spoke. I have put my name before and after what I speak of as the condition to the specification as

exhibited to contractors, and not now found in the specification attached to the original contract.

I now see the original schedule which Mr. McGreevy put in, spoken of before by me, referred to in his letter of the 29th November, 1859. A true copy of it is put in, marked exhibit No. 18. My figures in pencil appear on the margin, as indicating what I considered the value of the different classes of work, as corresponding with his contract. I now see the original schedule put in by Mr. McGreevy for the Departmental buildings. This is the one I spoke of, and to which he refers in his letter of the 29th November, 1859. The pencil figures are not mine nor do I know whose they are; it is on the printed form; a true copy is put in, Exhibit No. 18½. I cannot now remember the precise time I heard that Messrs. Jones & Haycock got the Departmental buildings. I did make out the schedule with Mr. Stent for the Departmental buildings, in the way I have spoken of. I now look at the contract between the Commissioner of Public Works and Jones, Haycock & Clarke. I know the signatures of Messrs. Haycock & Clarke. I am not certain of the signature of Mr. Jones. The respective signatures of Messrs. Haycock & Clarke are set in the contract opposite their seals, and they have both signed the specification and schedules attached to the contract, and the conditions on the specifications and schedules attached to contract. The conditions on the specifications, as it was exhibited to the contractors, have been erased, but I put in a printed form containing them, signed by me, exhibit No. 19. The schedule attached to this contract is the one prepared by Mr. Stent and me, abovementioned. The figures in it are mine; it is on the same printed form as exhibited to contractors. I now look at the contract between the Commissioners of Public Works and Charles Garth. I know his signature; his name and signature is opposite his seal to the contract, and his signature to the schedules attached.

30th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU

When Mr. Page came up, an estimate was made of the expense of roofing the boiler house, setting the boiler, building the main shaft, and doing everything about finishing the boiler house and shaft in the Parliament building. The estimate of the architects furnished Mr. Page was $20,000. Mr. McGreevy afterwards objected to this estimate, and made one himself, amounting to over $30,000. Mr. McGreevy told me Mr. Cauchon had directed him to go on with the work at his own estimate, without reference to the estimate of the architects, and he did proceed with the work to the extent we now find it, but I understood it was to be checked by Mr. Page afterwards to see which was the proper one. From the 9th to the 12th April, 1860, Mr. Garth was here, and gave directions about the ducts, and he saw some prepared for the eastern Departmental building; and he did not return till June. After he left, the ducts were begun on the Parliament building, and the foreman, by mistake, made some fine bouchard work instead of pick-faced; I saw and stopped him, and before Mr. Garth returned there were about 6,000 feet of picked work done. It was at my own suggestion the fine work was stopped. I was ordered, in the month of July, to make preparations for the Prince. This took me away and occupied me till the end of August, and I did little about the works but occasionally to look at them. After this I had leave of absence, and then was occupied at the accounts till near the close of the building season. By Mr. Garth's plan, the duct from the north to its junc-

tion with the duct from the library was eight feet; this accounts for the extra width of excavation there; and when it was built the walls were thick, to obviate arches. It was the direction of the architects. By Mr. Garth's plan, his downward ventilating ducts were shown to be where the principal doors to the legislative chambers and where all the other doors are; and in another place the walls of two of the angle towers were almost entirely cut off by his duct. I put in a schedule of prices of Arnprior marble, (Exhibit No. 20), for future reference to the Commissioners.

(Signed,) JOHN MORRIS.

1st SEPTEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

JOSEPH LAROSE, sworn:

I am a general builder. I was for 13 years head manager for George Blacklock, Imperial Government Contractor at Quebec. For three years after I was engaged in building for myself, and I have been in the employment of the Provincial Government, as superintendent of work, since 1856. I came here and reported myself to the architects on the 7th May, 1861. I was appointed by the Hon. Mr. Rose, as an Inspector to aid in carrying on the works of the Parliament Buildings at Ottawa, and to place myself under Messrs. Fuller and Jones, the Architects, who told me to make myself acquainted with the plans of the buildings, which I did for five or six days. During these days I visited the works, and found bad management in setting them out. Masons and bricklayers were shifted from one place to another for want of proper places to work. The masons were all close to one another on the piers in the basement of both Legislative Chambers, so close, that they could not work to advantage, and a great deal of time was lost in this manner. I also examined the work then done. The main tower was then to the springing of the arches, and the arch stones set. The front walls were up to the height of the ground floor windows. The east and west walls of the wings, and the north wall of the north tower, were up to the top of the string course under the ground floor windows. The north wall of the wings, and the east wall of the lean-to of the main building, were about two or three feet above the limestone foundation. The walls of the tower, under the Speaker's room on the Legislative Council side, were between 5 and 6 feet above the foundation. The interior wall of the Library was about 8 feet from the foundation. The outer wall and buttresses were to the surface of the ground. The remainder of the foundations throughout the building were up to the level of the basement floor. The bricklayers were working on the wall, on the basement of the east wing, the walls on the front part of which were up to the top of the ground floor joists. The walls of the court were up to the level of the ground floor joists. The brick work of the rooms on the north and east sides of the wings, about four feet above the foundations. The boiler house was up about 7 feet above the basement floor. No openings had been left for the tramway door. The foot flight of steps going to the boiler house was not completed. No interior brick walls in front of the building had been commenced from the court of the east wing to the west wing, excepting the telegraph room, where there was a small cross wall. In the west wing the two tower walls, and the walls between the east and west towers in front, were partly up to the top of the ground floor joists. The corridor wall under the room of the sergeant-at-arms was built up to the entrance door way. The ducts and drains were

finished except a piece of duct from the end of the west wing, which was in progress, and also a piece in the front each side of the wings, and a small portion of drain cutting the duct under the Legislative Assembly Chamber. This duct had been finished but men were then engaged in tearing it down to let the drain through. There was a very small quantity of brick on the ground, but a larger quantity of stone, which I was told had come from Hull, and a great deal also which had come from the excavations. There were 10 or 15,000 soft brick in the kitchen near the library. From the time I had made myself acquainted with the plans for the five or six days I have mentioned, I had nothing given me to do till the 16th May, when I asked Mr. Fuller if he would instruct me what I was to do. He answered, Mr. Morris would tell me what to do. Two days after this Mr. Morris came and told me to see that the bricklayers, who were building the walls of the circular staircase in the east wing, and part of the circular wall of the staircase to the public hall, put plenty of grout and mortar in the walls while he was setting out more work for the men. He left the work and I did not see him next day.

The two days following, I saw him about the library, but got no instructions from him. I was disgusted with the way I had been treated, and determined to leave. I informed Mr. McGreevy of my intention, and he advised me not to go, and he would see Mr. Fuller. The next day Mr. Fuller said he thought I would require a longer time to understand the plans. I answered I was competent to carry on any work on plans furnished me. He then gave me charge of the east wing to carry up the brick work already commenced, the year before, and gave me the plans of the east wing. When I got them, I found the interior walls of the three towers were wrong. Two of the walls were not according to the plans, one under the Secretary and Treasurer's room, which was 18 inches out of place; the other under the conference room, on which the brick work was not commenced, was two feet out of place. I was ordered to pull down the brickwork on the first mentioned wall, and to turn an arch across the room, on which to place the brick wall, and to excavate to the rock for a new wall, in place of the other stone wall.

On the 21st May, I commenced to take charge of the east wing, to carry on the walls which had been correctly set out. After I got the plans of the east wing, I found the work wrong; then the architects themselves began to measure it to see if they could adapt it to the plan as it ought to have been. The walls were corbelled over to make the rooms right. Mr. Rubidge was at Ottawa on the 22nd May, 1861, and saw the works. He asked me if there were men sufficient to carry on the work, so as to get it done in time; I said not, but there were more men than could work properly, for the walls were wrong, and had to be put right before more men could work. I said I did not wish to complain of work which had been done before I came, but Mr. Grist, who had been, would tell him how they were. He went to him and he showed him how the walls were.

On the 29th May, I commenced to excavate the foundations for the conference room, and to take down the brick wall of the French Translator's room, and alter all the hot air and chimney flues in the west wing which had been built wrong the previous year; but on the 3rd June, I received a letter, Exhibit No. 21, dated the 1st June, together with a small diagram, which showed me the part of the work I was thenceforward to superintend. I put in the plan marked I, of the portion I was to superintend. It is marked yellow. It contained the main tower and west wing to the Library, and the part of the building west of the Legislative Assembly Chamber, but not this chamber, but I had the west lean-to of it. On the 4th I received the plans of that part of the building allotted to me. On examining them and the work, I found that the interior walls of the two front towers, and the corridor walls south and west of the court were also wrong, and all the chimney flues and hot air flues throughout the part assigned me were wrong. The foundation walls of the French Translator's room to the Conference room, were wrong on this wing as I had found them in the east wing; walls of tramway; main wall of Legislative Assembly room; the walls under water closets; the walls under the Speaker's passage, and under his Secretary's room; the passage walls of the kitchen—were all wrong, so that they would not answer. I informed the architects of it. They came and measured, themselves, and found it so. They gave me orders to make new walls or additions, and to corbel over in order to save expense.

Along with this work, I carried on the alteration of the flues in the east wing till the 8th of June. On this day I left for Quebec, having first given directions to make wrong walls right, and other work to employ the men in my absence. I gave my plan to Mr. Grist, and Mr. Morris was also to take charge for me. On the 20th of the month I returned, and found that the flues in the corridor near the public hall had been omitted. I spoke to Mr. Morris about it; he said Mr. Garth did not want them, but Mr. Garth, came and said it was not so, he must have them, and I tore down the work and made them right. A wall between the tower and what had been previously built had been built 4 inches too thin in my absence. I took my work from Mr. Grist on the 20th, and possession of his, during his absence then. I laid out the exterior walls from the wing to the Library with the exception of two cross walls in the lean-to.

On the 15th July, I took charge of Mr. Morris's part of the work. The tramway walls in his portion were wrong, and I commenced excavating for new ones, and worked on till the 25th. I was frequently the only clerk of works on the building. On the 25th July, I left for Quebec, leaving the work in charge of Mr. Grist, and returned on the 29th and took charge of my own, Mr. Grist's, and Mr. Morris's work; with the exception of the brickwork in the Library, and continued to do so till the work was stopped. Mr. Grist was with the measurer. Mr. Morris was absent on leave, and on his retnrn, took no interest in the work whatever. I did not measure the work for progress estimates. I gave some few dimensions. Mr. Bowes and Mr. Grist measured the work. All the wrong work, and the work to put right was measured to the contractors.

The alterations in the flues were returned as extra days work in the day bills. Mr. Morris told me he laid out the east wing himself, and told the foreman to lay out the west wing the same, and I found invariably the same mistakes in the one as in the other. The foundation walls in the west wing, and west part of the building, are thicker than in the east wing. I cannot account for it. I myself was astonished to find it so. They are certainly too thick. The Contractor and his foreman laid the blame on Mr. Morris.

The wall now found 13 feet 6 inches thick from the back of the wing to the corridor wall, was made so from the fact that the two walls of 3 feet thick were both wrong. New ones had to be built, one between the two, and one outside instead of leaving a few inches between each, the whole was made solid, and made it 13 feet 6 inches instead of 12 feet, as the four walls would have made it. The walls are from a few inches to two feet too thick. The new work laid out by me has not been altered, except a trifling one. No error of mine cost the government a shilling. The reason for not lining the outer walls with brick as the outer walls are built was, first, the difficulty of having masons and bricklayers on the same scaffold, secondly, that on reference to the plan, it will be seen that the walls have to contain many flues for hot air, and there is but little bond, excepting where the interior walls join the exterior. In these, indents and teeth have been left all along the walls.

The walls of the lower story were not run up like those of the second story. These second story walls were in fact partly run up after the works were stopped by Mr. Killaly's orders; for, when the order came to stop the works the walls, were of different heights, and in order to enable them to be covered properly, he directed them to be brought to a level, and the front wall to have the cornice on. The cornice was not backed, and the interior walls were left chiefly at the first floor, except in the west wing where the exterior walls are partly up. The brick were not all hard burned brick, but they are good brick for interior walls. The exposure since the works stopped subjected them to the weather, and some have failed. I forgot to mention another wrong wall, which I found—the wall in the public hall, 3 feet 6 inches, or four feet thick, supporting the principal columns, was laid out erroneously—it was 15 inches to one side. To remedy it, where the steps came, I built a wall 18 inches alongside the other, to support the steps and columns, and I made an arch from the wall to the boiler house to support the centre columns. The same thing had to be done on the other side of the rubble wall, for both were wrong alike. The wrong walls had been built the year before. I do not know by whom. The architects gave me the directions to put them right. The piers to carry the columns in the members' lobby, in front of both Legislative Chambers, are wrong. The wall on which they were to stand

was four feet thick, but it has been so built that the columns will have to stand on the edge of the walls instead of the centre. This has not been altered yet. The reason why the wrong walls have not been taken down and right ones built, was that the architects said it would take more to take them down and rebuild them, than to correct them as we did. It was cheaper to add 15 inches than to build a new wall.

I always got the plans when I wanted them. I never saw architects pay more attention than they did, after I came. They seemed much annoyed at finding the work wrong. The putting in the flues which had been omitted, was given in by me as extra days' work; there were men employed from the time I commenced till August, and their wages amounted to about $451.73, for putting right this work. The architects gave me verbal orders to do it, and I made the contractors do it. Mr. Morris, in instructing me, gave me no plan or orders except to see that plenty of mortar was put in with the brick, and the walls grouted. I was not ordered, nor did I order anything about the brick lining. It had been done so the year before, and seemed the mode of doing the work. I did object to bricks at the front, once or twice, but these were not on the works. The time bills for extra days' work are for altering the flues. I have measured for perforating the flags in the air ducts, and for skew-backs in the arches in the piers under the members' corridor. The arches of which these skew-backs form a part were shown on the plan, but had not been put in, when the piers were carried up. I do not recollect speaking to the architects, but I did no extra work without asking their instructions. I ordered the skew-backs to be put in and they were put in, and I gave the time as extra. I believe it did not exceed $12.00. The brick are not as in the specification, but in using my judgment I considered the bricks good brick for the interior walls. The work under the boilers is common rough rubble masonry. We built walls 5 or 6 feet face, and filled in with small stones and grouted them. The excavation in the rock for the boiler house was 2 feet 10 inches, on the average, two deep, and we had to build it up again, with rough rubble masonry, partly done, and partly to do. The part excavated too much had an area of 74 by 68, and was 2 feet 10 inches deep. This made about 527 yards erroneously excavated. I allow the ducts as equal to the thickness of the walls, the foundations of which were also erroneously executed. They are about 6 feet thick. Some part was excavated 3 feet 8 inches, some 2 feet 2 inches; the average was 2 feet 6 inches.

All this had to be filled in again with masonry. There is in the boiler house an area of wall, 105 feet by 7 feet faced with heavy cut stone, uselessly. It would have been better rough rubble work, for brick work had to be built against it. There is also pick faced masonry behind the stairs to the boiler house. The exterior walls of the Parliament Building on the east and west sides are corbelled over the foundation from nothing to six inches, but they are not corbelled over the plumb of the upper wall. I have no personal knowledge of who made the mistakes in the boiler house excavation and masonry. There are hot air flues in the external walls, but what I have said about the prevalence of flues, applies to the interior walls chiefly. The deafening boards of the ground floor wall rest on the brick walls, and slope in some cases downward toward the walls, and run the wet against them. The deafening boards were to have been 1½ inches square, and half an inch apart, instead of which they are now inch boards without space between them. This change was made, because, on an experimental trial, concrete thrown nearly broke the 1½ inch pieces, and they were changed as they now are, in consequence.

The ten and fifteen thousand brick which I would not have used were afterwards, by Mr. Morris's order, used in the walls of the vault, built by Ryan the master brick-layer.

18th AUGUST, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU,

JOSEPH LAROSE, further examined:

Two ducts run from the boiler house in the Parliament Building, one west, the other south. They were excavated 2 feet 10 inches lower than they ought to have been, and the drain under the western is 2 feet 10 inches deeper than it ought to have been. The excavations were made to suit the erroneous depth to which the bottom of the boiler house was excavated. This increased the excavation and the filling in, but not the masonry in them. I do not know who laid the excavation out, or directed it. The excavation for the western duct and drain is about 15 feet wide on the top, and 10 feet at bottom, and from 16 to 17 feet deep. I have seen the rock under the west part of the building. There was no necessity for excavating the rock from the surface for the interior walls.

I think even where the rock was at the surface, it was proper to put the foundation of the outer wall 3 feet under, to prevent the frost from getting under the foundation, but it was not necessary in the interior walls. The great extra expense in this building arose from erroneous and unnecessary excavations, and erroneous and excessive thickness of walls in the foundations, erroneous and unnecessary depths and sizes of excavations for ducts and drains, and useless and expensive masonry in the boiler house and ducts. There was a great deal of useless expense in extra day labour, in levelling the rock in the Library. It could have stopped up just as well. There is a tramway through under the whole building to allow the passage of a horse and cart, to take fuel to the boiler house, and take away snow from the court if necessary. It is 7 feet high to the springing of the arch, and 7 feet wide. The side walls are brick 9 inches thick with piers one and a half brick thick at every door, and on a stone foundation. Its length is about 100 feet on each side of the boiler house.

The boiler house wall had been erroneously built where the tramway was to run, and had to be pulled down, and the jambs built on the sides. This was extra. I do not know who made the error. The mismanagement was not during the summer I was there, for the architects were attentive and the contractors did every thing they were required to do. Mr. McGreevy was not there always himself, but his brother, who was his manager, was constantly on the works. I believe the brick work was sublet, but it was the brick laying only, not the material. I am acquainted with the modes of measurement in Quebec and Montreal; beds and joints are not measured in either place. The toise of masonry is 72 feet French measure or 84 feet English. A wall under 2 feet is measured as 2 feet, and all openings measured as solid, under ten feet wide. In the main tower the rubble columns had been built with the wall, at least they were in when I came. They ought not to have been built in, and were taken out, because the settlement of the wall crushed the bands of Ohio stone between the different parts of them. The cornice, which appears now crooked and somewhat damaged, did not fall, but was tipped over. The masons had commenced it from both sides and were about to close it in the centre. The shears were in the inside of the building, and when they were hoisting the last stone of the first cornice, the men carelessly allowed it to catch under the projecting corner of the cornice stones inside. This tipped them up, and that part of the cornice fell from the opening to near the west tower. It was injured a little but put up again. No part fell by its being corbelled over too much, or want of cramps. No cramps were specified, and I had no conversation with Mr. Morris about them. The contractor put the cramps in himself; he stated the cramps were to be removed in the spring, when the cornice was backed, and what was crooked reset in the spring. I now wish to explain why I allowed brick not agreeing with the letter of

the specification into the building. When the specification was made, a large part of the exterior wall was to be brick. They were required to be hard, of course, but the schedule spoke of two kinds, one for exterior and one for interior walls, as I understood. Using my own judgment in reference to these, I allowed the brick to be put in, which are now found in the walls, quite good for interior wall if protected.

(Signed) JOSEPH LAROSE.

JEAN BAPTISTE TISON, sworn.

I am a measurer by profession in the city of Montreal. I have followed it 25 years. I am acquainted with the mode of measurement, and prices of builders' work in Montreal. A toise of rubble masonry is 72 French feet, or 87 feet English measure. A toise of quarry stone contains 216 French feet cubic, or a pile 6 feet on every side. These we measure by a French rule, but we apply the English measure to work executed. Cut stone of all classes of work is measured on the face only; we allow in arch work double the soffit; in rubble masonry, openings under ten feet are counted at solid; over ten feet, half of the opening is deducted. In measuring buildings like these I see, for rubble work, I should measure the whole work, excluding half the openings over ten feet in width. If walls are under two feet thick they are measured as two feet, but if over, the excess is measured with the wall, and the whole cubed and reduced to a toise of 87 feet. Brick work is measured by the thousand, deducting all openings, flues, and fire places; 20 bricks are allowed to a foot, but our bricks are smaller than those I see here. Seventeen of the brick I see on these buildings, will make a foot. Rock and earth excavation is measured by the cubic yard. Moulded cut stone work is girthed; circular work is doubly measured. Earth excavation is done in Montreal for 15 cents per yard; carted away, for filling and ramming, the same price. Rock excavation in Montreal is done for between $1,20 to $1,50 per cubic yard, any depth to 18 or 20 feet; over this, 50 per cent in addition. Rubble stone is delivered at Montreal for $6 to $8 a toise of 216 French feet.

Rubble work of a toise of 87 feet in the wall, is there worth $6 to $7. At this rate a labourers' wages is 70 to 80 cents; masons' $1,20 to $1,50; lime about 16½ cents or 10d a bushel. River sand in Montreal is worth $1,69 per yard, pit sand $1,00 per yard. Bricks in Montreal are worth $5 to $5,50 a thousand, mixed half hard, half soft. Measured in the wall, they are worth $8 a thousand. I am not acquainted with Ohio stone; pick-faced masonry, including stone, is worth 20 cents; the work on it 10 cents. Rough bouchard work, including stone, 25 cents a foot; work alone 12 cents. Fine bouchard work, 30 cents, including stone; work alone 15 cents a foot. In measuring walls faced with cut stone, the cut stone is included in the rubble work, and this pays for setting it; the rubble stone itself being measured and paid for, as I have above stated. In measuring arches, nothing is allowed for centres. The prices I have mentioned would apply to the work of the classes I have seen here in the ducts, except those in the boiler houses, which, including stone, is worth 60 cents a foot, measured on the face only. Large blocks for cut stone are worth from 20 to 80 cents per cubic foot, according to size in Montreal; none of the large class is used in these buildings. To prepare limestone for courted rubble work, such as I see in these buildings, would cost 5 cents a foot in Montreal limestone. Rubbled limestone over fine bouchard work would be worth 5 cents a foot extra; moulded work 10 cents a foot, over bouchard work. Slate work such as I see here is worth in Montreal $7 a square, with felt $8. Gravel roofs are worth from $4,50 to $5 a square. Tongued and grooved boarding 1¼ inch thick, for roofs, in Montreal is worth $3,50 a square. The lumber used for this is worth $15,50 to $16 a thousand feet, superficial. Flooring in Montreal, laid, is worth $4,50 for 1¼ inch and $5 for 1½ inch stuff.

(Signed,) J. B. TISON.

WILLIAM HAUGHY, sworn:

I am a Stone Cutter and Mason by trade; I have followed the business about 18 years. I was general foreman for Mr. McGreevy on the Parliament buildings. I came at the commencement of the work, and continued till their close, excepting from about the 15th March, till the 15th May, 1860. From the commencement in January, 1860, till I left in March, we had cleared the site of the old Barracks, fences, and rubbish, which were upon it, and had begun to excavate the main west drain from the Parliament building. When I returned, the excavations for the foundations for the Library had been completed, and the walls begun. They were building the cold air ducts which cross the library. The main duct to the boiler house they had got to its depth. It is low, excepting the corner which they were blasting, and they were building in it. They were excavating clay, earth, and loose rock, under the Legislative Council chamber, and towards the main tower, but had not done any rock excavation till after my return. Mr. Burns had charge of the works in my absence. There was a set of plans of the building in a room to which I had access, but I had not time to run up every day to refer to them, nor did I think it my business to refer to them. I thought it the business of the Inspectors, and I had no plans for a while, but directions from Mr. Morris from scraps of paper. About the 25th June, I got a tracing of the plan of the whole foundation from Mr. Morris; it was the plan I worked from. On my return I took charge of the works. I started and continued the walls of the cold air ducts from the boiler house, both east and west, and north and south. I next commenced the wall north of the reading room of the Legislative Council, from directions given me by Mr. Morris. It was built about 9 inches south of its proper place, according to the basement walls as they were put upon it. This causes the basement wall to overhang the foundation. The east outer wall of the speaker's office was built about 4 feet too far in, by order of Mr. Morris, and after it was about 4 feet high, it was left, and is there still, and the wall built in its proper place. Mr. Morris told me each side was to be alike. I took a square, and set off the wall of the reading room of the Legislative Assembly, in the same way, and it is too far south, and the basement wall overhangs it in the same way. The next work we did was in the walls of the Legislative Council Chamber. On the south portion of it, mistakes were made, and the erroneous walls are found there. He gave me directions for all the walls marked on the plan D, within the line traced by him, and also the Speaker's office, which he has not included. I had the plan he gave me, and he told me to lay off the walls as marked on the plan. He gave me also the length and depth of the east wing, and the whole distance from the centre point of the building to the extreme east point, and from that to the north point, and from that north, to the north-east angle of the Parliament building. He told me that the west was to be the same as the east, and I made it so; and to prevent mistakes, I used in Mr. Morris' absence to ask Mr. Grist where certain angles and walls were to be made, and he would answer me he did not know. I was not very particular about making the wall 5 or 6 inches either way, rather than have the men idle, and I laid them out as I best could over rough ground. Mr. Grist made remarks sometimes that the walls were too thick, but it was after they were up he would say so. In many places the plans did not show the thickness, and seeing the Inspector so careless, I was not going to stand about the thickness, and keep Mr. McGreevy's men idle.

Mr. Morris made some slight remark one day, about a wall that appeared rather thick, and concluded by saying it did not matter much, as it would give something to come and go on a more exact setting out, that would be on the ground floor, and to get the corridor on a straight line. I did not ask Mr. Morris or hear Mr. McGreevy ask to be allowed to make the walls thicker to get rid of the rough material. The walls are thick because I had no proper directions. I wanted the Inspectors to see that they were right, before they were built upon, and they did not do it, and I did not consider it was my business to lay down lines. When the basement walls came to be laid down, the foundation walls were frequently found wrong, and new pieces were built to them, and sometimes new walls. Some stood on the edge; and some were corbelled over. I believe the walls were allowed to Mr. McGreevy by Mr. Grist, just as they were found. I do not know who directed the excavating of the ducts and boiler house. I believe it was Mr. Morris. I should

say the excavation on the south front of the east wing was 7 feet on an average wider than the building, taking into account what would slide down ; along the south front to the angle of the east tower of west wing, 7 feet; round the main tower, 7 feet; along the west half of the south front, 4 feet 6 inches; and around the west to the angle of the library, 4 feet 6 inches. From the south east angle of the building round to the angle of the library on the east side, 4 feet 6 inches on an average.

Mr. McGreevy paid his labourers from 75 to 90 cents ; quarrymen, $1.00 ; masons, $1.40 to $1.75 ; bricklayers, the same ; stone cutters, most of them, $1.75 ; carpenters and joiners, $1.40 to $1.75 ; foremen, from $1.50 to $4.00 per day.

There was a great deal of delay in getting directions about the boiler house from Mr. Morris, and other great delays caused in carrying the main drain from the west under the walls of the Legislative Council on to the boiler house, and great delay in waiting for the stone for heavy weatherings, for the main tower, a heavy kind of stone that was required, and great delay in waiting for Arnprior marbles for the columns for the main tower. Mr. Morris would have them in ; as the tower was built they were taken out again, for the main tower in settling crushed the Ohio stone bands in the middle of them. There was also delay in laying out the brickwork in May, 1861. I do not remember how wide I was told to make the main sewer from the west, but it is not wider, I believe, than was necessary to get to its depth, and to back the cut stone to the rock. It was Mr. Morris told me that the walls of the air duct over the main sewer would answer for the tramway, and they were uselessly carried across the Legislative Assembly room, as they were not on a line with the tramway on the other side of the building.

In the circular wall at the angle of the main entrance, I got directions from Mr. Morris to make it thick enough, and I did it. It is from 1 foot 6 inches to nothing around the quadrant. All these walls in front were put there under Mr. Morris' eye, and if he did not say exactly where they ought to be, he was there to see them, and did not object to them. The walls between these quadrants are built according to Mr. Morris' figures, as I have them. They are 18 inches out of their place, so that the columns in the public hall will stand on the edge of the walls. I have examined plan K. (No. XIV.) I see upon it Mr. Grist's figures of the depths of the rock excavations within the building. I should think his depths as there marked were taken rather under than over the depths. I did not pay myself much attention to this. It was a man called John Conway who had charge of the men who excavated the rock, and Bernard Dunning also had charge. I cannot venture an opinion as to the depth of the excavation inside the building, as I am not sure. I was mistaken in speaking of the excavation around the main tower, and in front of the building from the angle on east side of the west tower to the west angle of the east tower. The excavation would average 7 feet 6 inches beyond the walls. I omitted to state there were delays to the contractor in the year 1860 in the change from Brockville to Ohio stone in the windows and weathering of the towers in the east and west wings. Another great delay was waiting for instructions on alterations in the Library in reference to thickening the walls and buttresses, and for a decision to do away with hollow walls about the Library and towers of the wings, to add buttresses to the boiler house walls, and lean-to of the Legislative Chambers.

These delays caused the men to be crowded on the foundations, and made confusion, and loss on the works to the contractor, and this occurred in May and June, 1861. In starting the wall in front of the east wing, I asked Mr. Morris how thick the wall was to be ; he said 6 feet, and I made it so. I have seen the architects about the building, but they never gave me any directions about the thickness of the walls ; it was Mr. Morris. I did not see the architects checking in any way the foundation walls. I have seen Mr. Grist taking measurements, but he never told me whether the walls were right or wrong till it was too late ; when I asked anything he said he did not know. Mr. McGreevy told me to do nothing without the direction of Mr. Morris or the architects. One time he told me not to make any alterations without their written order. When I wanted instructions from Mr. Morris, he would not be found ; and when I asked Mr. Grist, he would not know, so I had to do the best I could with the plan. I had to keep the men from being idle. I set out the walls with the footings as the plan showed and carried the foundation wall

that thick all the way up to the basement wall, as I understood Mr. Morris to say they were to be so carried up to the brickwork.

The cutstone for the ducts was most of it made from stone from the excavation; rough stuff it was, and most of the foundations were built of stone from the excavation, and the rubble walls of the ducts were mostly built of the stone from the excavation. In my opinion it would have been cheaper to have brought stone, than to have used such rough stuff. Where chimney breaks were shown on the plans, they were built solid across the whole walls, because it was easier in using the rough stuff to do it, and no one objected to it. It was easier to build thick walls with these rough stones than thin ones, and seeing there was no objection, I put the walls in thick. No one objected to the thick walls excepting on the occasions I have mentioned. I was in Mr. McGreevy's interest, and I did not stop about the thickness of a wall, in keeping men idle for instructions. The foundation walls in front were from 6 to 18 feet in depth; in rear of the wings from 7 to 13 feet; in the north part from 3 to 4 feet. The thickness of the foundation walls was from 2 to 6 feet. Where duct walls and division walls came near each other they would be made solid. This occurred whenever they were within 18 inches of each other, for it was easier to do it than face the walls. In the west wing there is a wall about 13 feet 6 inches. Two walls of 3 feet each were built out of place. Two more had to be built; this would have made 12 feet; but because they were near each other, they were made solid, and the wall 13 feet 6 inches thick. I do not remember Mr. McGreevy giving me any instructions about the thickness of the walls. I remember once his noticing their thickness. He shrugged his shoulders, and said it could not be helped from the roughness of the stuff. The drain from the boiler house is low enough to drain the excavation; and, if it is lower than it ought to be, the drain is so also. I do not know how low it was to be excavated. The air ducts were made as low as the excavation in the boiler house, for all was on a level before the walls were started.

The marble columns ought not to have been put in while the work was building. The division walls in the foundation were generally carried up with the outer walls. In the basement, the division walls were not generally carried up with the outer walls, but toothing in the walls was left for them, and in the first floor, some division walls were carried up. These were left till the outer walls were up a piece. In the second floor only, one or two have been built. In some places it was more convenient to do it this way, in regard to attendance. The boiler house walls were built, about May, June and July, 1860. The main doors were built up, I suppose, because no directions were given about them; and although Mr. Morris said there were to be stairs, we had no directions; and pick-faced masonry was in part built behind where the stairs now are; but Mr. Burns can explain to what extent this occurred. I think the pick-faced work in the boiler house was up to the height it now is, about the 1st September, 1860. The hot air and ventilating flues were in some instances started below wrong; and, in the upper walls, they came into contact with openings, and their direction had to be altered. This arose from want of proper instructions in starting them at the bottom. The plan may have been right. This has caused a good deal of useless work. The cut stone was worked by the day; and I think on an average that one man with another, taking into account the rough ground, refuse stone, and the large size and weighty nature of the different kinds to be cut, could cut 6 feet 6 inches per day.

(Signed,) WM. HAUGHY,

3rd SEPTEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

SAMUEL KEEFER, Sworn:

I am Deputy Commissioner of Public Works. I have been so since the 9th May 1859. I assumed my official duties on the 10th. My duties are partly defined by the act relating to public works, and partly by the civil service act. I understand my duty to be to attend to the practical and professional part of the Department, and its routine business, which is generally done by report to the Commissioner when he is present, but when he is absent, I act for him, and when any difficulty occurs I report to the Council, as I am allowed to do by the statute, and I am generally put in communication with some member of the government to advise with in the Commissioner's absence.

Before I assumed my office, the notice for competing plans and designs had been prepared and sent to the printer. It was published on the 10th May. The first thing the Commissioner directed me to do was to attend to it; but I had no opportunity, and it came out before I saw it. In reference to these buildings, the first thing I did was to look over, revise, and approve of the amount of accommodation required for the Legislative buildings, the Government departments, and the residence of His Excellency, which had been prepared by Mr. Rubidge, who bears the title of assistant engineer and architect of the Department of Public Works. In referring to dates, I say, I keep a journal, and from that I speak of dates.

I was desired to be at Ottawa on the 21st May 1859, to attend the Governor General and a portion of his Council, who had come to visit the place, and look out a site for the buildings. I remained till the 23rd May. There were present His Excellency, the Hon. Mr. Vankoughnet, Mr. Cayley, and Mr. Killaly. There may have been others. We visited Barrack Hill, the Major Hill, and Ashburnham Hill, a place to the west of this. There seemed to be no difference of opinion about Barrack Hill being the place for these buildings; but there was difference of opinion about the other place for the Governor General's residence; and although there were different opinions, I understood it was settled to be on Major's hill, a place east of the canal containing about 40 acres, and opposite Barrack Hill, the Rideau canal being between them. The Government offices at Toronto were closed on the 14th and opened at Quebec on the 28th July 1859, and the Commissioner left for England on the 23rd July, and I was in charge till his return on 22nd September. Although the offices were closed, the Governor General and his Council remained at Toronto till after the 27th August.

I do not remember when the plan showing the levels of the sites of these buildings which had been made by Mr. Slater, was prepared. We had it when Mr. Morris was at the office giving instructions to intending tenderers about the plans. It had been made sometime previous to that. There were no test-pits sunk to ascertain the true state of the foundations. There could not properly be, until the plans were received, as we could not know in what shape they would be. The competing plans were received at Quebec and Toronto, not later than the 1st August. On the 2nd August I was desired to send all the plans which had been received at Quebec to Toronto, and I did it immediately. On the 13th I got a summons to go to Toronto, to consider and report upon the designs, and I was desired to bring Mr. Rubidge with me. I left Quebec for Toronto on the 15th and arrived on the evening of the 16th, and I began the examination on the 17th with Mr. Rubidge whom I found there. I took the plans to the Parliament buildings in Toronto, where there was room, and had them extended on the walls where they could be seen and properly examined, and where the public had access to them.

Mr. Rubidge had fallen in with Mr. Morris, who was then engaged on the University buildings, and he brought him down to assist in the examination. We examined the plans, and Mr. Rubidge made his report to me on the 23rd August 1859. It is printed in the blue book, page 13 ; and I made my first report to His Excellency on the 25th. It is published, blue book, page 12. On the 26th August I received the letter of William H. Lee, Esq , and the memorandum of the Governor General dated the 25th August, with a view to the reconsideration of the report of myself and Mr. Rubidge. This letter and memorandum are the last documents printed in the blue book after the errata. Upon this I made my report of the 27th August, (see blue book, page 15½.) and upon this report the Order in Council of the 27th was made. On being informed of this order in Council, the architects repaired to Quebec, and I gave my instructions to Messrs. Fuller and Jones on the 9th September, and to Messrs. Stent and Laver on the 14th September.

These instructions are printed in the blue book, pages 20, 21, 22, 23, and were made by me after a full consideration of the plans by myself, Mr. Rubidge, the architects of the respective buildings and Mr. Morris. Before these instructions had been written or given to the architects, and on the 8th of September, the notice to contractors for the buildings had been issued. The notice is printed in the blue book, page 19. It stated that " sealed tenders will be received at this office until Tuesday the first day of November next at noon, for the erection of the Parliamentary and Departmental buildings in the city of Ottawa, in accordance with the plans and specifications, which may be seen on application at the offices of the architects in Ottawa and Toronto, on and after the 15th day of October next. For information relative to the Parliamentary buildings, parties will apply to Messrs. Fuller and Jones, architects, Ottawa and Toronto, and in reference to the Departmental buildings, to Messrs. Stent and Laver, Ottawa, and for both, at this office. The tenders are to be addressed to the Secretary of Public Works, Quebec, and endorsed, tenders for Public Buildings, Ottawa, and to be signed by two or more responsible persons, who are willing to become security for the due performance of the contract. Printed forms of tender will be supplied, and no tender will be received unless in accordance with the form."

This early notice was given that there might be no delay in letting the contracts, and was done at the instance of the Hon. Mr. Vankoughnet, and Mr. Sherwood, two members of the Government. The instructions to Messrs. Fuller and Jones of the 9th September, and to Messrs. Stent and Laver of the 14th September, were the instructions given to the architects to prepare the plans for intending tenderers. While these plans were being prepared, Mr. Morris was sent to Ottawa, and elsewhere, to examine the stone and other material about Ottawa, and report. His instructions are dated 9th September 1859, (Exhibit No. 22,) and his report is dated 4th October 1859, (Exhibit No. 23.)

It was found that there was not time for the architects to make the plans ready, and a postponement took place till the 15th November, for receiving tenders. The matured plans were not received till between the 15th and 30th October, and from that time till the 15th November, there was not time to sink test pits to ascertain the actual foundations and adapt the plans to them. And if I had given the architects instructions to modify their plans, I could not myself have given instruction as to the sinking of the test pits until the plans were matured; and even if test pits had been sunk, the plans must have been modified afterwards, which there was not time to do.

There were no instructions given to architects, as to the positive levels of the ground, although we had a plan showing these. The plan I now see marked H, is a tracing of the plan showing the levels of the ground. I say, that from the time plans were received, although the position of the buildings is shown on the plan, and it was not put there till after the contract plans were made, and there was not time to sink test pits, and make the plans in accordance with the levels. And after consultation with the architects as we had to show something definite to the contractors to tender upon, it was agreed that an assumed line of five feet under the finished surface of the ground, or of two feet under the assumed ground line would be a fair average for the level of the foundations, and the plans were accordingly made so. The plan shows the difference of level of the ground between the east and west, of the front of the Parliament building, to be on the southern

façade, 5 feet two inches; between the north and south points, through the Library, 1 foot 5 inches. We had then no knowledge of the rock, except where it cropped out at the Library. My impression then was that the rock would be found a few inches under the surface anywhere. The difference between the level of the ground at the south east angle of the western Departmental block, and the south west angle of the eastern block, was 8 feet 8 inches; between the south and north of the eastern Departmental buildings 2 inches; between the south and north of the western Departmental buildings, 7 feet 8 inches. There must, in exhibiting plans to contractors, be an actual or an assumed line. There was not time to exhibit the actual one, and it was arranged with my consent that the assumed line should be exhibited. I knew there would be extra work in the foundations, but I had no idea how much. The plans were got up in so hurried a manner, we had not time to consider them maturely, and we adopted a system of question and answer to afford information alike to all parties. They are attached to these contracts.

We were exhibiting plans in three places, and as one question was answered in one place, we telegraphed the answer to all the places. Tenders were received in the office of the Department till noon of the 15th of November 1859, and conveyed unopened to the clerk of the Executive Council. They were opened by the Executive Council, and afterwards returned to the Department of Public Works for report. I made my two reports of the 17th November to the Commissioner, and the Commissioner on the 17th November to the Council, who, on the 22nd November made the Order in Council. (Blue book, page 25.) After noon on the 15th November, nine tenders were received, and as they were too late, they were not opened, and are now shown to the Commissioner yet unopened. The order in Council of the 22nd accepted the tender of Mr. McGreevy for all the buildings although no schedule had been attached to his tender, but he was directed by the order in Council to prepare a schedule of prices to the satisfaction of the Department of Public Works.

On or about the 29th November, he sent in the schedule of prices, one for the Parliament Building, and one for the Departmental Buildings, but they are not signed by him, although referred to in his letter of the 29th November. These were not accepted as satisfactory, because the prices were exaggerated, and if he had been paid on them, he would have been paid the full amount of his contract, long before the work was done. The quantities, estimated at these prices, would have exceeded the contract very materially. A good deal of time was lost in connection with these schedules; the Department could not agree to them, and they had to be prepared so that both parties could agree. These schedules of Mr. McGreevy's were given to the architects and Mr. Morris, to prepare others adapted to his contract. They did prepare them, and they were attached to Mr. McGreevy's contract, and signed by him. The architects were responsible that the prices in the schedules should agree with the bulk sum of the contract. It is the practice of the Department to have schedules of prices such as these, for architectural buildings, although neither the notice to contractors nor the form of tender required schedules of prices to be given. Printed schedules were issued with the forms, and it was intended such schedules should be delivered with the tender, and it was generally so understood. The heading of the printed schedule alluded to the fixed rates and prices therein, as forming the basis of the accompanying estimate and tender.

I do not recollect that Mr. McGreevy in any communication he had with me, ever stated that the notice for tenders did not require him to give a schedule of prices.

4th SEPTEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

SAMUEL KEEFER,—Examination continued.

A copy of the Departmental order with reference to tenders for Public Buildings at Ottawa, dated 12th November, 1859, I put in (No. 24); also, my report on the tenders, dated the 17th November, 1859 (No. 25); also, copy of my letter to the Commissioner, dated the 17th November, 1859 (No. 26); also, copy of Mr. McGreevy's letter, dated 16th November, respecting fire-proofing (No. 27); also, copy of the Report of the Commissioner, dated 17th November (No. 28); also, copy of the letter from the Department, dated 24th November, telling Mr. McGreevy upon what conditions his tender would be received,—among others, that he should prepare and submit schedules of prices to the satisfaction of the Department, (No. 29,) to which Mr. McGreevy's letter of the 29th is an answer; also, his letter of the 30th, and the Commissioner's Report to His Excellency the same day,—to all of which I refer (No. 30.) I did not recommend the acceptance of McGreevy's tender. On inspection of the schedules submitted by McGreevy, the prices were so arranged, that on all the work he had first to do he would have drawn two or three times the value of the work, and the prices were generally higher than the bulk sum warranted.

From conferring with him, I saw it was utterly hopeless to expect from him a schedule which would be satisfactory, and I directed the architects to prepare one, so as to be applicable to the tender, and they did so. I then told Mr. McGreevy that these schedules had been prepared in accordance with the bulk sum of his contract, and unless he agreed to them he could not get the contract. He would not agree that they should apply to extra work, but to the progress estimates on the contract work alone. He objected to the clause in the form of contract which the Department had been using, and which had been exhibited to intending tenderers, which clause, No. 7 of the printed form, I now put in, marked Exhibit No. 31. He said he would not do extra work to be estimated by our officers. About this time the contract was being drawn by the Attorney General, and in reference to the last clause of the contract, which was drawn by the Attorney General, the words are modified, and it is stated "that if any change, alteration, or addition either in position or details of the works embraced in this contract, or in any material therefor, shall be required by the Commissioner, the contractor will make such change, alteration, or addition, and if such change, alteration, or addition, shall entail extra expense on the contractor, either in labour or materials, the same shall be allowed to the contractor, or should it be a saving to the contractor, in either labour or materials, the same hall be deducted from the amount of this contract."

When the notice to tenderers was issued, I understood that all extra work was to be paid for by the prices mentioned in the schedules; they were prepared and headed with this view. I made no report to the Government of Mr. McGreevy having spoken of conditions in regard to the schedule. I reported it to the Commissioner. All the objections Mr. McGreevy made to the schedule were made before the contract or schedules were signed. I now look at the original contract between Her Majesty, represented by the Commissioner of Public Works, and Mr. McGreevy, and say, that the schedule attached to it is on the same printed form which had been issued with the forms of tender, and is the one prepared under my direction by the architects. I see that this schedule has been signed at the top and bottom by Mr. McGreevy, and the prices in the heading apply to extra and additional work, as was intended by the Department of Public Works, when the tender was received, it should do. I do not remember being present when the contract was signed. There were conditions annexed to the specification, as exhibited to tenderers,

but they were struck out of the specification which I see attached to the contract. I understood they had been in substance embodied in the contract. The contract, as I now see it, was delivered to the Department of Public Works, and is in its possession.

I have now before me the contract for the Departmental Buildings entered into between Her Majesty, represented by the Commissioner of Public Works, and Messrs. Jones, Haycock and Clarke. I see the schedule of prices attached to it. This is on the same printed form which was shown to intending tenderers, and is headed, "to apply to extra and additional work." It appears to be signed at top and bottom by the contractors. It is the schedule of prices prepared by the architects under my directions, as applicable to McGreevy's tender for the Departmental Buildings. While these schedules were being prepared, Mr. McGreevy, on the 1st December, wrote to the Commissioner to say that in order to secure the speedy erection of the Government Buildings at Ottawa, if the Government acceded, they might let the Departmental Buildings be given to Messrs. Jones & Co., of Upper Canada. Upon this, the Commissioner reported to the Government on the 2nd December, 1859 (See blue book, page 31); and by an order in Council of the 5th December, Messrs. Jones, Haycock & Co., were substituted for Mr. McGreevy, for the Departmental Buildings; and the schedule of prices which had been prepared for Mr. McGreevy, for the Departmental Buildings, was attached to their contract for these Buildings, as I now find it. I had no communication with them on the subject of the schedule. I do not know on what principle the Commissioner did away with the schedules, as applying to extra or additional work, attached to the contract, nor what the agreement was in reference to it; but I understood from the Commissioner that the extra and additional work was to be paid for at fair prices, and inferred the schedules were not to apply to extra or additional work. I understood from the Hon. Mr. Rose, that it had been settled between him and Mr. McGreevy, that the schedule of prices in the schedule prepared for the contract should not apply to extra or additional work, but to the progress estimates on the contract only. All this was settled before the contracts were signed, and in this view of it I consider it a clerical error, in not having the schedule made according to this arrangement. After I had told Mr. McGreevy that he must agree to the schedules as prepared by the architects, and as I believed applicable to the bulk sum of his contract, he said he would agree to that if it did not apply to extra work. I do not remember what I said in reply, but the Commissioner was informed of it, and the arrangement about it was made by the Commissioner himself and Mr. McGreevy. A draft contract was prepared under the directions of the Commissioner, by a clerk who usually does it.

It was in the form the contracts of the Department usually are. This was submitted to His Excellency for approval on the 2nd December. The Commissioner submitted that he had the honour to submit for His Excellency's approval, a draft of the contract proposed to be entered into with Mr. Thomas McGreevy, Master Builder, Quebec, for the erection of the Parliamentary and Departmental Buildings at Ottawa, in accordance with the order in Council of the 23rd of the last month.

In connection with this contract, the Commissioner begged to add, that he had received a communication from Mr. McGreevy, the day before, which he transmitted with his report, in which he, Mr. McGreevy proposed to relinquish the Departmental Buildings to Messrs. Jones, Haycock & Co., Contractors, Port Hope. The Commissioner saw no objection to the proposed division of the work, provided the aggregate of the two contracts so divided did not exceed the gross amount of Mr. McGreevy's tender, with the estimate for fire-proofing added. That is to say the sum of $627,310 for the whole work. This report was followed by the order in Council of date the 5th December, 1859. (See Blue Book, page 32.) In accordance with the division of the works between Mr. McGreevy and Messrs. Jones, Haycock & Co., two contracts were prepared by the law Officers of the Crown, and submitted by the Commissioner to the Executive Council, requiring instruction for the execution of it. The order in Council of the 5th December, 1859, authorized the division of the contract as it now is. I say that I understood from the Commissioner, that the schedule thereto was attached to it, but was not to apply to the extra and additional work.

Mr. Keefer is asked why it was that the prices mentioned in the schedule attached to the contract were not to apply to extra and additional work. Upon this question being asked, Mr. Keefer submitted whether he ought to disclose his knowledge of it, derived from his superior officer in the Department, till he can communicate with him. The Commissioners said that if it were a matter of knowledge which transpired in the Executive Council, it was his duty not to disclose it, but if it were a knowledge he derived in transacting the public business of the Department with his superior officer, the Commissioners know of no rule of law or public expediency, which would justify his withholding it, but as Mr. Keefer desired to have time to consult with the late head of the Department, it was allowed, and the enquiry waived for the present.

I understood that Messrs Jones, Haycock & Co., stood precisely as Mr. McGreevy did, in respect of the schedule attached to their contract, and had all his rights, and no more. In the first estimate in which extra work appeared on the Parliament Buildings for March, 1860, I noted on the margin of the estimate that the schedules of prices did not govern the extra work. On the March estimate for the Departmental Buildings Mr. Rubidge wrote on the Margin: "No schedule prices given, the rates being determined "by local judgment and experience of the resident architects and clerks of works, and are "taken to be fair and just."

I signed the estimates for the Parliament Buildings for the month of January, February, March, April, June and July. The estimates for May, August, September, October and November, are signed by Mr. Rubidge, and I signed the estimates for the Departmental buildings for the months of January, February, March, April, May, June, July, August, September and October; November is signed by the architects and clerks of works only. My signature was intended to certify to the Commissioner that they were correct, and in accordance with the contract. This is for the satisfaction of the Commissioner. When estimates come in they are opened by the Secretary and brought by him to the Commissioner and me, and they are then referred to Mr. Rubidge to be examined, to see that they are in accordance with the contracts and prices. His signature without remark shows they are all right, if anything wrong it is marked on its proper place in the estimate. It is then returned to the Commissioner and me, and I examine it. All that are signed by me I examined. Those that are not signed, I did not examine.

Upon the estimate upon the Departmental buildings for May, 1860, I noted—"the "prices for cut stone per foot in items 1, 2, 3, appear to me excessive, deduct half." This was not final, but left for consideration, and a correspondence with the architects took place about it. I do not remember hearing anything more of the schedules till the 4th June, 1860. Mr. McGreevy called at the office with Mr. Jones, Mr. Powell, M.P.P., of Ottawa, and Mr. Burton, M.P.P., of Port Hope, for the purpose of obtaining a revision of the schedule of prices.

Mr. McGreevy claimed that the progress estimates should be made on the schedule he first put in. The Commissioner said he would refer the matter to the architects, and they were telegraphed to come down immediately, and they came. No alteration was made but a correspondence ensued, and the architects declined to interfere in altering the prices in the schedule. I refer to the letter of the Department of the 12th June, 1860. All the extra work from the first was returned at prices above the schedule rates. The Department of Public Works contemplated a system of heating and ventilating, and there were flues and chimneys in the contract plans, but no system had then been matured for the purpose. The best mode of heating and ventilating was not then a settled point, and there was not time to mature a plan so as to have it incorporated in the plan for intending tenderers.

The ninth clause of the contract contemplated such a system, but the Department did not construe that clause, as entitling the government to make more flues, or alter those marked on the plan, as part of the contract work, although in strictness it might have been. As the event has turned out, it would have been prudent to have had the heating and ventilating in the plan. I did not think so then, and I was pressed to go on with the work in the fall of 1859. If this system had been at first incorporated with the plans, and if test pits had been sunk, and everything done which could have been done, the work could not have been proceeded with till some time in the summer of 1860.

If we had waited to adjust the heating and ventilating to these buildings, we could not in my opinion have commenced the work in 1859. The excavation could have been begun before the plans for heating and ventilating had been matured, but not the building. On the 28th January, 1860, Messrs. Fuller and Jones, and Messrs. Stent and Laver were informed of the acceptance of Mr. Garth's tender, with modifications, and that Mr. Garth was to proceed to take his plans to Ottawa, to be matured under their direction. No part of the building, in reference to Mr. Garth's plan, could go on until his plan was modified, and adapted to the buildings, but the excavations were proceeded with as soon as the plans were received.

On the 11th April, 1860, I was in Ottawa, and met all the architects and Mr. Morris, to consider and examine Garth's plans. We examined them three hours. His plans met with general approval, and I left Mr. Garth in the architect's hands to correct some details observed in our examination. I thought his plan was very complete, it had been to a certain extent adapted to the buildings, but there were certain defects to be remedied. Garth's specifications remained in the architects' hands till November, and his contract was not signed till the 12th January, 1861.

5th SEPTEMBER, 1862.

MEMBERS PRESENT :

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR, BOURGEAU.

SAMUEL KEEFER, further examined :

When the tenders for the heating and ventilating were received in Quebec, Mr. Fuller was there, and was requested to report upon them. On his report I made mine. His report is dated the 23rd January, and published Blue Book, page 128. Upon this, I, on the same day, made my report, confirming and recommending his. My report is published in the Blue Book, page 142. The only difference was, he was in favor of a fan, I was not.

The Commissioner reported on this matter to Council on the 26th January. Reference is made to this in the Blue Book, page 144. Upon this the order in Council was passed the 28th January, accepting Garth's tender, with such modifications as had been suggested by the architects and Deputy Commissioner. Immediately all the architects were informed of this, as I before stated.

On the 9th February 1860, Messrs. Fuller & Jones informed the Department that they had arranged with Mr. Garth, the various details respecting the warming and ventilating the Parliamentary building. I refer to this letter in Blue Book, page 162. The next step in the matter was in April at the meeting with the architects and Mr. Morris, of which I have spoken. On the 23rd August, 1860, letters were addressed from the Department, to Messrs. Fuller & Jones, and Messrs. Stent & Laver, informing them that all the plans furnished by Mr. Chas. Garth, for the heating and ventilating of the Parliament buildings at Ottawa, had been that day forwarded by express to their address, in order that they might have copies of them made for their own use during the progress of the works, and desiring them to send back the originals to be attached to the contract in the office of the Department of Public Works. On the 16th October, 1860, letters were addressed from the Department to Messrs. Fuller & Jones, and Messrs. Stent & Laver, requesting a meeting at Quebec, for the purpose of agreeing upon, and drawing up specifications for the contract for heating and ventilating, in accordance with the plan agreed

upon, and the tender and conditions approved by the order in Council. (See letter Blue Book, page 163.)

No meeting took place then, but on the 6th and 7th November 1860, I met the architects at Ottawa. We discussed and approved the specifications for heating and ventilating, and they were signed by the architects. I took these with me, and on the 8th reported upon them to the Commissioner, and I sent down documents connected with Garth's contract to have it made out. The contract was in the meantime prepared and was signed on the 12th January 1861. I was with the Commissioner at Ottawa when the ground was broken on the 20th December 1859. On the 11th April 1860, I was at Ottawa, and saw the works on that day. On the 21st June 1860, I was at Ottawa to inspect the Prescott and Ottawa Railway, and on that day I visited the works. The eastern Departmental building was all up to the basement floor, and about half the basement walls laid in the Parliament building. The model of the Library was then nearly finished. I was next at Ottawa on the 10th August, and again at the laying of the foundation stone on the 1st September, but I came two days before to see that the arrangements had been completed. I made no inspection of the works then. I was again at Ottawa on the 6th and 7th November, I went over the works then with the Honble. Mr. Sherwood and the architects. On the 6th I was with Messrs. Fuller and Jones examining the estimate of October, which had been delayed at the instance of Mr. McGreevy that he might include in it his iron-girders. While I was there on that occasion, Messrs. Jones Haycock & Co., complained of delay in getting their plans. I had a meeting with them and the architects on that subject. The contractors wanted detailed plans of all the works at once, to enable them to cut stone during the winter.

The architects said on the other hand they had plans enough to go on with, and after some demur on the part of the architects, they agreed to supply all that was necessary. The view I took was that they ought to have plans enough to carry them through the winter, but I thought them unreasonable in desiring them all at once. These were all my visits of that year. I cannot remember the state of the excavation of the drains and ducts on my visit to the works in April 1860. I do not remember when these excavations were commenced. I have no knowledge of the authority for doing these excavations outside the building. For all that was done in sinking the foundation down to the rock, for foundations, ducts and drains, under and in the buildings, there was the authority of the Department. I was not, nor am I now aware that there was excavation of solid rock over any considerable area of the building. I saw a portion of loose rock at two feet deep, between the building and the Library, but I gave no directions to the architects. They were there for that purpose. I was not aware of any rock to be removed except for the foundations of the walls, and only loose rock, I do not remember, and I have no memoranda of what rock had been removed from the Library at my first visit in April.

I have no remembrance of seeing what work had then been done in the ducts and drains outside the building, but something must have been done, for I see it in the estimate. I must have noticed the works in June, but I do not remember what impression they made on my mind.

In November, the excavations were far advanced, and attracted my notice. I thought there was going to be an immense amount of unauthorized extra work. I then saw the character of the work in the drains, but I do not remember about the ducts. There was no estimate called for by, or supplied to the Department connected with the preparation of the buildings for the ducts, drains, boiler house, or flues for Mr. Garth's contract. I considered it almost impossible to make an estimate of the alterations, and works inside the buildings, and I did not then contemplate running the ducts more than outside the walls of the buildings, because no plans were ever made and matured showing where they would terminate. And as no plans or estimate had been prepared, no authority could be given for doing the work, and no authority for doing it was given.

The Architects were definitely instructed to do no extra work without the written instructions of the Commissioner. If any extra work was done, it rested with them to get that written order, and whatever work was done without that written order, was done on their own responsibility. The only written orders which the Department gave or

sanctioned, have been laid before the commission. I now refer to the first order given by the Department to Messrs. Stent and Laver, dated 10th December, 1859, and to the first order given to Messrs. Fuller and Jones, dated 12th December, 1859, containing also their instructions. (See Blue Book, pages 131 to 135.)

I next refer to the letters of the Department to the respective architects, dated the 28th January, 1860, referring to Garth's contract. The one referring to Messrs. Fuller and Jones is in these words :

" I am directed by the Honorable the Commissioner to inform you that he has accepted the tender of Mr. Charles Garth, of Montreal, for the heating and ventilating of the Parliamentary and Departmental Buildings at Ottawa, on the steam and vault system, according to his plans and specifications, and to the printed conditions submitted for competition, with certain modifications, mentioned in Mr. Fuller's report, and subject to such other modifications as upon the maturing of the plans, may meet the approval of the Commissioner.

" The modifications referred to by Mr. Fuller are,—First, the working of the boilers at a higher pressure than 10 lbs to the square inch. Second, confining the vault system in the Parliamentary Buildings to the Library and central part, and applying steam radiators, joined with an approved system of ventilation, to the wings. Third, that if upon further investigation it be found necessary for insuring success in the ventilation of the Parliamentary Buildings that a fan be used, it shall be provided by the contractor for that purpose, and an efficient engine to propel it.

" The contractor has been instructed to put himself in communication with you, and will take up his plans to be matured under your directions. Specifications to be prepared and everything to be arranged between you and the contractor, subject to the approval of the Commissioner, in order that a contract may be entered into with this Department, which shall embrace the whole system of warming and ventilating, in as complete a manner as it is possible for you to devise, and these plans and specifications shall not add anything to the amount of the tender, which is sixty one thousand two hundred and eighty five dollars for the whole."

And the one referring to Messrs Stent & Laver is in these words :

" I am directed by the Honorable the Commissioner to inform you that he has accepted the tender of Mr. Charles Garth, of Montreal, for the heating and ventilating of the Parliamentary and Departmental Buildings, Ottawa, on the steam and vault system, according to his plans and specifications, and to the printed conditions submitted for competition, with certain modifications mentioned in Mr. Fuller's report, and subject to such other modifications as, upon the maturing of the plans, may meet the approval of the Commissioner.

" The modification referred to by Mr. Fuller, is the working of the boilers at a higher pressur than ten pounds to the square inch.

" The contractor has been instructed to put himself in communication with you, and will take up his plans to be matured under your direction. Specifications are to be prepared, and everything arranged between you and the contractor, subject to the approval of the Commissioner, in order that a contract can be entered into with this Department which shall embrace the whole system of warming and ventilating, in as complete a manner as it is possible for you to devise. These plans and specifications shall not add anything to the amount of the tender, which is sixty-one thousand two hundred and eighty-five dollars for the whole."

The next order given is that of Messrs. Fuller & Jones, dated 14th February, 1860, but transmitted by the Department to Mr. Morris on the 22nd February; signed by John Morris, clerk of Works, approved and signed by the Hon. Mr. Rose, the Commissioner, and countersigned by me in these words :—

" You are hereby requested to excavate the ground for the various foundations, down to the surface of the rock, and also the whole area of the central court, and all the trenches requisite for the cold air ducts in connection with the warming apparatus, and leave openings for doors in the basement walls of the rooms in the front part of the building, so as

to give access and fit them for future use, should they be required, giving them light also from without, and fire-places within, as shown in the working drawings."

The next letter is from the Department, dated the 1st February, 1860, to the respective architects, in these words:

"I am directed by the Hon. the Commissioner to inform you that the block plan showing the sites of the Parliamentary and Departmental Buildings, and their respective levels, was submitted to and approved of by the Executive Council, and that you are to arrange the levels of the buildings as thereupon represented.

"The clerk of works, Mr. Morris, has been notified to the effect that, you are to have free use of the drawing which is in his possession."

I know nothing further about the Nepean stone than appears in the correspondence published in the blue book, excepting that when I was here in December, 1859, I saw some nice looking stone lying about the [illegible] on the Barrack Hill, said to have been brought in as specimens of stone in the neighborhood. It was the kind of stone we wished to use, and which Mr. Morris had not found except at a distance out of reach. On enquiry it was found to have come from a quarry of Mr. Augustus Keefer, about 10 or 11 miles distant; as soon as it was examined it met with general approval, and Messrs. Fuller & Jones and Messrs. Stent & Laver suggested its use. The letter of the 15th February, 1860, was addressed by the Department to Mr. Morris on the subject; I refer to it, and to the report of Mr. Morris, dated the 22nd February, 1860. (See Blue Book, page 259.) There ought to have been no dispute about the substitution of it for Ottawa stone in the building.

When the competing designs were inspected, the contents of the buildings were cubed and a rough estimate of their cost obtained in this manner. The cubic contents of the buildings from ground to roof are taken, and allowing 6d. a cubic foot, which I understand was the actual cost of the University of Toronto, I found they were all within the estimate in this rough way, except the Parliament Building, which I estimated at £90,000. I learnt afterwards, from Mr. Morris, that the University cost 7½d. a foot, but I did not know this at the time. When the contract plans were preparing, I felt afraid that when we came to carry the designs out, good *bona fide* tenders would show they would cost more than had been allowed, and in order to keep within the sum mentioned in the notice the plans were drawn as cheaply as possible. Wooden floors were put in, and several things which I do not now remember, to make them as cheap as possible and keep within the limits. I feared all along it was impracticable, but considered they were Government works, built by Government, and that whatever we did build should be done well, and not be condemned afterwards as mean or unworthy; and, anticipating the decision of the Government with respect to the fire-proofing, it was included in the notice.

The Department did not call on the architects officially to take out quantities, but they furnished me with an estimate when I reported on the tenders. I did not test the accuracy of their estimate. I thought the tenders would be the best test. I thought it might be done for their estimate. I objected to the architects taking out quantities to dispose of to intending tenderers, lest the Department should be committed to these quantities. There was an estimate by trades of the Parliament Buildings and also of the Departmental Buildings.

These were the data of my bulk sum report. I never supposed the appropriation would complete the buildings for this reason:—Before I came into this office, the Assistant Engineer and Architect of the Department had furnished an estimate given on page 8, of the Blue Book stating, that to complete the buildings, would cost £285,656 8s 11d, and the appropriation of £225,000 being less than this, and as I never yet knew an architect or engineer's estimate but was exceeded in the actual construction of the work, I therefore concluded that the appropriation was only so much towards the buildings. The plan showing the levels of Barrack Hill, was made between my visit here on the 21st May, 1859, and the 6th June. I instructed Mr. Slater to make a survey of Barrack Hill, and give the levels.

He did so, and on 6th June, 1859, sent the plan to the office. It was taken for the purpose of sending to the architects, and my impression is that it was sent. I cannot

now tell why the actual ground line was not marked on the plans for tender, instead of the assumed. The plans were prepared by separate architects, who did not know where the respective buildings, would exactly be placed. They did not know the respective levels of the buildings, nor how far they would be apart, or how placed in reference to each other therefore the actual line was not adopted. It did not occur to me at the time, that it was of much importance to show on the contract plans the actual ground line of where the buildings were to be placed, and the locations of them were not made in consequence, till after the tenders were accepted. I look at the progress estimate for the Parliamentary Buildings for the month of March, 1860. I find contract work amount to $1,217.95, and extra work to $4,375.95.

The chief sums are for rock and earth excavation ; of this, rock excavation in the main drain was $1,861.80. It is on this estimate my memorandum is made. "The schedule of prices does not govern extra work." My authority for making this was my knowledge that, whatever the contract said, the arrangement with Mr. McGreevy before it was signed was, that the schedule of prices should not apply to extra and additional work. The Commissioner was as well aware of this as myself. It was not my duty to report that I found the schedule did apply to extra work, for the Commissioner himself knew it already. I considered this was the arrangement Mr. McGreevy had made with the Commissioner, and I but carried it out. If Mr. McGreevy had not tendered too low in the competition to get the contract, there would have been no need of this arrangement. As it was in the schedule, the more work he got the more ruinous it would have been to him. Mr. McGreevy never gave a schedule of prices to the satisfaction of the Department, in compliance with the conditions of the order in Council which authorized the acceptance of his tender. I told the Commissioner the schedule he gave was not satisfactory, and after the department prepared the one which is now attached to the contract, McGreevy said he would not have it applied to extra work, and the Commissioner agreed it should not so apply, before the contract was signed.

I again refer to the objections of Mr. McGreevy's adviser, and this was my reason for not applying it to extra and additional work ; and I thought until I saw the contract, that it had been drawn in accordance with the agreement. I did not think it my duty to remonstrate against what my superior officer had done in this matter. The next estimate I look at is that for April. The whole contract work amounts to $2,158.80 ; the whole extra to $9,468.75 for this month, of which $2,968 40 is for rock excavation in drains, $3,046.30 for rock excavation simply ; earth excavation $774. There are in this estimate 781 days' work amounting to $988.30. This extra work was passed without applying the schedule prices for the same reason. The estimate for May I did not examine myself. The next one I refer to is for June 1860. The whole contract work is $16,170. Extra work $20,796.38, of this there is of earth excavation $343.16, rock excavation, and in drains $2,677.05, rubble masonry in foundations $9,336, labour on pick faced masonry in boiler house and cold air ducts $5,001.21. Pick faced stone for drains $875.

The next estimate I refer to is for July 1860. Contract work is $7,342.17. Extra work $25,230.95. Of this there was for earth excavation $853.26. Rock excavation and in drains $1,368. Rubble masonry in foundations $16,656 Picked arches for cold air ducts, picked faced stone for same, and pick faced prepared for drains $5,204.94.

The estimates for the months of August, September, October and November, I did not examine.

Looking at the estimate for the Parliament building for May, which I did not examine or sign, the whole contract work is $1,730.00. Extra work $15,863.94 of which there is for earth $459.00. Rock $695.00. Rubble masonry in foundations $8,200.00. Labour on pick face of boiler house, and cold air ducts $3,802.34. Circular wall of library faced stone prepared and steps for boiler house $1,144.00. Time bills and sundries $1,563.40.

The estimates for August and September I did not examine or sign. The contract work is $41,864.00. Extra work $33,348.61 ; of this extra work there is for earth work $83.70, rock excavation $2,282.00. Rock excavation in drains and ducts $2,458.00, Rubble masonry in foundations $14,760.00. Stone prepared for boiler house, air ducts.

and drains $5,919.24. Nepean sand stone prepared $1,706.38, for Ohio stone $1,080.00. For Ohio and Brockville stone $1,043 15. Filling to wall $708.90. Sundries $118.80. Arnprior marble $262.50. Centering and materials $936.35. Days' labour $1,288.00.

The estimates for October and November, I did not examine or sign. In this there was contract work, $5,360.80. Extra work, $14,952.40 of which there was earth excavation $17.40. Rock excavation in drains and ducts $683.35. Pick faced masonry in boiler house and cold air ducts and drains, $5,072.24. Nepean facing above limestone, $704.97. Ohio stone delivered, $678.00. Filling to wall, $1,672.80. Days' work $1,836.05.

The estimates for the Parliament buildings are marked No. 5. A, B, C, D, E, F, G, H, I, K, L.

Those I now look at are the estimates for the Departmental buildings No. 5. a, b, c, d, e, f, g, h, i, k, l.

In the estimate for January, 1860, the contract work is $2,505.52. No extra.

In the estimate for February, contract work is $4,316.80. No extra.

In the estimate for March, contract work is $4,256.59. Extra, $7,223.65. Rock excavation, $1,506.37. In drains, $5,628 50. It is on this estimate Mr. Rubidge made the memorandum, in these words. "No schedule prices given, the rates being determined "by the local judgment and experience of the resident architects and clerk of works, "and are taken to be fair and just."

When I signed this estimate, I saw the words and understood them to mean that the schedule prices attached to the contract were not to be applied to extra work on these buildings, according to the arrangement made between the Commissioner and Mr. McGreevy, before his contract was signed, and as Messrs. Jones, Haycock & Co., stepped into his place, the same arrangement was to be applied to them. I made no report of this, and took no official notice of it, as it was known to the Commissioner, and was but carrying out his arrangement, and the extra work on all the estimates, was allowed on the same principle as on this.

In the estimate for April, the contract work is $947.93. Extra, $5,396.45 of which there is of earth excavation, $324.00. Rock excavation, $1,512.35. Rubble masonry in lime mortar, $2,552.00. Extra labour on face of boiler house, $711.10. Cutting stone, and covering trench, $397.00.

In the principal estimate for May, the contract work is $6,076.97. Extra work $20,756.19 of which there is for earth, $3.30. Rock excavation, $12,267.95. Rubble masonry, $6,368.00. Extra labour on boiler house and shaft, $1,896.00. Days' work, $292.54. In the supplementary estimate for May, there is no contract work, but extra work is $14,340.56 of which, earth excavation called clay, is $2,477.40. Hard pan, $4,086.00. Rock excavation, $4,272.60. Extra labour in faced work of smoke arches in boiler house, and cold air ducts, &c., $1,240.31. Cut stone prepared for cold air ducts, $2,264.25. I made a remark which is written on this estimate which is not examined by Mr. Rubidge. "The prices per foot for cut stone, in items 1, 2, 3, appear to me excessive, deduct half." The first item, rock excavation below ten feet, is returned at $5 per cubic yard. No. 2, extra labour in arches of cold air ducts, at $2.50 per foot, is allowed, superficial. No. 3, cut stone prepared for invert arches of drains, $1,90 a foot; at that time half was only allowed, making a deduction of $1,076.00 from the account, but a correspondence ensued. I refer to the letters of the Department dated 26th June, 1860, No. 32,709, (Exhibit No. 32,) and the 11th July, 1860, No. 32,922 (Exhibit No. 33,) and the replies (Exhibits Nos. 34 and 35.)

In the estimate for June, there is of contract work, $6,082.01. Extra work, $30,595.26 of which earth excavation is $4,282.00. Rock excavation, $12,665.70 Rubble stone masonry, $10,080.00. Days' labour $526.46. When I signed it, I referred to letter of architects of the 14th July, (Exhibit No. 34,) and to which I now refer.

In the estimate for July there is of contract work, $23,044 80. Extra work, $13,904.05 of which there is of earth excavation, $628.30. Rock excavation, $8,132.55. Rubble stone masonry, $1,376.00. Excavation in boiler house and cold air ducts, $2,554.15.

Nepean stone facing, $498.96. Cut stone prepared for boiler house, and cold air ducts, $4,465.05. Days' labour, $532.70. In the estimates for August, and September, together, there is of contract work, $8,473.98. Extra, $27,430.07 of which there is earth for spoil bank, $533.50. Rock excavation, $21,367.55. Rubble stone masonry, $9,264.00. Rock excavation in boiler house, and cold air ducts, &c., $2,770.00. Bricks laid in mortar, $1,587.83. Nepean stone facing, $3,011.61. Cut stone prepared for boiler house and cold air ducts $2,445.75.

6th SEPTEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN.

JOSEPH SHEARD, VICTOR BOURGEAU.

SAMUEL KEEFER, further examined:

In the estimate for October there is of contract work, $16,663.74. Extra $26,373.72 of this there was of rock excavation in eastern block, $5,638.45. In the Western one $9,986.50. Extra labour in Boiler House, $2,583.00; brick in mortar, $2,156.97; Nepean stone facing, $1,983.87; arches and sides of drains, $1,556.00. Nepean sandstone delivered $1,712.55.

In the estimate for November, which I did not examine or sign, there is of contract work, $1,506.50; extra work, $12,002.48, of which, for earth excavation, there is $98.15; rock excavation, $6,001.45; rubble masonry, $856.00; extra labour on cold air ducts, $407.00; brick laid in mortar, $550.12; Nepean sand stone facing, $407.68; cut stone prepared for cold air ducts, $321.00; centreing, $463.20; arches and inverts stones built in drains, $2,205.00. I look at the items of the time bills from month to month, and say it was not my duty to check these, but the duty of Mr. Rubidge. I saw the amounts were large, but objected to it from time to time, but it was continued until the amount was large, and then Mr. Page was sent to inquire into it. I suppose Mr. Page would go over these details, and, if not found right, would reject them. These extra works were not ordered, and no remonstrance was made at the time, because it was supposed the architects were on the spot to do what was right and just towards the Contractors and the Government, and I had, at that time, confidence in them that they would do it.

(Signed,) SAMUEL KEEFER.

WILLIAM COVERDALE, Sworn:

I am an architect, and live in Kingston. I have followed the profession twenty years, and have lived in Kingston thirty years. I have been engaged in a great variety of works there. I am acquainted with the modes of measurement in Kingston, and the value of work there. My knowledge of the modes of measurement and values is local. I speak of Kingston only. There is a similarity in the limestone of Ottawa and Kingston. The stone in Ottawa is rougher, and not so easily worked. In pick dressing, the stone in Ottawa as compared with Kingston stone, 20 per cent would be the difference. Cut stone is measured on the face only, beds and joints are never measured. A toise of stone from the quarry is 216 cubic feet, piled in the

rough. A toise of rubble masonry is 72 cubic feet. We measure 36 feet superficial on a wall of two feet, which is the standard. All under two feet is measured as two feet, if the wall exceeds two feet, its cubic contents are taken and divided by 72, as the toise. No deductions are made for openings in rubble masonry. We measure brick by the thousand, and always deduct openings; we allow 16 bricks to the cubic foot, but the mode in Kingston is not to measure brick work by the cubic foot. We take the superficies of the wall, and if the wall is half brick, allow six bricks, if one brick thick twelve bricks, if one and a half brick, eighteen bricks to the foot superficial of the wall. All thicknesses over that are reduced to the standard of thirteen inches, and eighteen bricks allowed as the foot of a thirteen inch wall, which makes about sixteen bricks to the cubic foot.

The toise of quarry stone delivered at the buildings is $2,50 to $3 a toise of 216 feet. Masons' wages are $1,50 a day; labourers' 75 to 80 cents. We allow a dollar a toise for mortar; lime is 10 to 12½ cents per bushel. Sand is 3 cents per bushel. Bricklayers' wages $1,50 a day.

Such work as I see in the boiler house here, in Kingston would be worth 12½ cents per foot; the work in the ducts 10 cents per foot, measured on the face only. Arches are measured on the soffit on what is seen in the wall, with other work. In the basement stories, rubble work is worth $4 a toise of 72 feet in the wall. In upper stories the average is $5 per toise. A toise of 54 feet would just be worth one-fourth less than these prices, but we never measure by the 54 feet toise in Kingston. Bricks, for the last three years, have averaged $7 a thousand delivered. Brick in the walls averages $12 a thousand, which includes mortar, labour, and scaffolding. All these prices embrace a builder's profit of 20 per cent. The actual prime cost of the work is 20 per cent lower than I have stated it. We measure flues as solid, as an equivalent for plastering them inside. Our flues do not average over a foot square. Excavation in drains three to four feet wide and five to six feet deep is 60 cents per cubic yard.

If the excavations were wider, say from 12 to 15 feet, and 10 feet at bottom 50 cents a cubic yard. We have no deep excavation except in wells, and then we add 50 cents per yard extra for every five feet down. If the excavation was wide enough to admit of being drawn out, 25 cents per yard extra for every five feet. If the stone had to be lifted out, 50 cents extra for every five feet in depth. Earth excavation to 6 feet, 20 cents per cubic yard; our rock does not usually lie deeper. Earth from spoil banks and ramming, I should say, the same as excavation, 20 cents a yard.

In excavating rock for a house, if the rock is given to those who do the work, it is equivalent to the labor of excavating, and nothing is charged. A builder considers it an advantage to quarry on the site, it saves drawing. I never knew an instance of rock from excavation being allowed as stone delivered. If the excavation is paid for by the proprietor, the stone excavated is his, not the property of the excavator. I never knew of stone measured by any other toise than 216 feet. In measuring circular cut stone work, if the curve is flat, we allow 50 per cent; if a quick curve, 75 to 100 per cent, over plain work.

(Signed) WILLIAM COVERDALE.

8th SEPTEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU,

JAMES BAINE, sworn.

I am Book-keeper in the Department of Public Works. Part of my duty is to prepare certificates for warrants to be issued, authorizing payments to parties entitled to it for work done to the government through the Department. In regard to these public buildings, the regular course was for the year 1860, to make progress estimates from month to month of work done, and materials provided, as the work proceeded.

These estimates were at first signed by the architects of the respective buildings, and the clerk of works. When received at the office they were registered and laid before the Commissioner, who referred them to the Assistant Engineer, and architect, or the Deputy Commissioner, whose duty was, as I understand it, to see that the works were authorized, and the prices properly rated. The Assistant Engineer or Deputy Commissioner signed them as vouching for their correctness so far. They then passed to the Secretary, whose duty it was to lay them before the Deputy Commissioner, who examined and approved of them, and laid them before the Commissioner. If the Deputy was absent they went direct to the Commissioner, who endorsed them as authorizing the certificate to issue. If the Commissioner was absent, the Deputy endorsed them for the same purpose. They were then in charge of the Secretary who sent them to me, and I prepared the certificate for the warrants upon them, keeping the estimates as the vouchers of the Department. After I had prepared the certificates for the warrants, the Secretary put his initials to them, and also in the margin of the book containing an abstract of them.

The certificates were then taken by me to the Commissioner to sign them, or in his absence, to the Deputy Commissioner. The certificates when signed, were given by me to Mr. Harper, who sent them to the Minister of Finance, and the Secretary, in writing, informed the party in whose favour they were issued, that they had been issued. The party entitled to payment goes to the Receiver General, who pays the money. In the year 1861, the estimates were not certified in the same way. Why the change was made, I do not know. All the estimates I got for the Parliament Buildings from the commencement of the work until, and including August, 1861, I placed to the credit of Thomas McGreevy. On the 11th September, 1861, I was ordered verbally to prepare a certificate in favour of Thomas McGreevy for $40,000. On the 8th October, I was ordered to prepare another certificate in his favour for $40,000. On the 19th October another in his favour for $10,000, and the 20th November, I was ordered to prepare another certificate in his favour for $45,000. All these certificates which I was verbally ordered to prepare, were signed by the Hon. Mr. Cauchon.

I had no estimates or accounts to authorize the issuing of them. I charged McGreevy with these sums, and credited him with the balance, charging it to a suspense account. This account is debited with this balance, and credited to Mr. McGreevy, and now stands so in the books of the Department. I made the entry in this way, as the most convenient for reference. The suspense account was also charged with the balance of the amount advanced to Messrs. Jones, Haycock & Co.

The suspense account embraced the two amounts advanced to the respective contractors. There was no explanation given to me why these certificates were issued. I put in now a true copy of the account between Mr. McGreevy and the Government, in reference to the Parliament buildings, it is marked exhibit No. 36. He is charged with all the certificates issued, and credited with all the progress estimates, and the balance against

him is $140,290.68 for which there is no voucher so far as I know. The estimates for the Departmental buildings were made out in a way similar to those of Mr. McGreevy, for the year 1860, and till August, 1861.

All these estimates from the beginning of the work, until and including August, 1861, I credit to Messrs. Jones, Haycock & Co. On the 11th September, 1861, I was verbally ordered to prepare a certificate in favour of Jones, Haycock & Co., for $23,700. On the 9th October I was ordered to prepare another certificate in their favour for $30,000. On the 28th October I was ordered to prepare another certificate in their favour for $10,000. On the 20th November another certificate in their favour for $45,000, and on the 13th May, 1862, I was ordered to prepare another estimate in their favour for $2,000.

All these certificates, which I was verbally ordered to prepare, were signed by the Hon. Mr. Cauchon. I had no estimates or accounts to authorize the issuing of them. I put in a true copy of their account with the Government in reference to the Departmental buildings, (Exhibit No. 37.) There is a balance against them of $145,923.

I had no estimates with which to credit Mr. McGreevy, and Messrs. Jones, Haycock & Co., for the amount advanced them by order of the Commissioner to enable me to close the general account current of the Department, with the Province for the Auditor General. I charged the balance to a suspense account for public buildings Ottawa, and credited Mr. McGreevy and Messrs. Jones, Haycock & Co., with the sums charged to it. The general account current thus showed the sums in suspense, and showed the Department that none of its officers had any money in hand.

The order in Council of 19th November, authorizing $100,000 to be applied to the Parliament Buildings at Ottawa, had a memorandum on the back, with the initials of the Hon. Mr. Cauchon, to issue certificates to Mr. McGreevy for $45,000, and to Jones, Haycock & Co., for $45,000, but my impression is, I prepared the certificates on a verbal order. I rendered the Auditor the accounts current of the contractors, showing the sums in suspense.

(Signed,) JAMES BAINE.

JAMES DYSON SLATER, sworn:

I am an Engineer, at present employed by the Department of Public Works as Superintendent of the Rideau Canal. I was desired by the Department in May, 1859, to make a survey and take the levels of Barrack Hill, which I with the assistance of Mr. Boyle, of the Ottawa Survey, performed immediately, and returned a plan showing the shape of the ground, and its levels at every 50 feet, as compared with the assumed low water of the Ottawa River,—a point 6.63 feet above the lower sill of the entrance lock of the Rideau Canal. The rock where the Library is built, is 158 feet above this. I see a tracing of my plan with the Buildings laid down upon it, marked H.

If the sites of the buildings had been traced on the plan, or if I had been told how large the buildings were to be, and their distance from each other, I could easily in a week, have tested the depth of the rock, at any required point, so as to have shown the depths of the foundations. My plan showed the level on every point at 50 feet distances, over the whole ground. The area of the ground, exclusive of the steep slopes, is nearly 28 acres. The slopes are precipitous, except on Wellington Street, and a small portion of the south-west portion of the ground, on Bank Street. In the front of the Parliament Buildings, the original ground line was 5 feet lower at the east than at the west corner; but the centre was 6 feet higher than the west end, and 11 feet higher than the east end of this building. The south-east corner of the western Departmental Building, was 9 feet higher than the south-west corner of the eastern Departmental Building. The difference of the level of the east front of the western Departmental Building, was 8 feet. The north being the higher level. On the south front of the same building, the difference in the level was 4 feet, the east being the higher. The difference of the levels of the west front of the eastern Departmental Building, was 1 foot, the north being the higher. The

difference of the south front of the same building, was 1 foot, the east being the higher The difference of level between the south-west angle of the Parliament Building, and the north-east angle of the western Departmental Building, is 1 foot, the Parliament Building being the higher; and between the north-east angle of the western Departmental Building, and the north-west angle of the eastern Departmental Building, is 17 feet; the western being the higher.

(Signed,) JAMES DYSON SLATER.

PATRICK MCMAHON BURNS, sworn:

I was employed by Mr. McGreevy, as Superintendent of the works in the Parliament Buildings. I commenced on the 3rd April, 1860. When I began I was chief superintendent, and so continued until the end of May, or beginning of June, when Mr. Haughey succeeded me as chief superintendent. From the time I ceased to be superintendent, I acted as foreman over the buildings, till June, 1861. I was introduced by Mr. McGreevy, as his superintendent, or foreman, and I was told to do as he ordered me. When I began, the excavation in the Library was out in the south-east corner, but not in any other part. The north-west side, rose at a slope of about 3 feet. On an average, I should think the excavation for the Library all round was 5 feet. I assisted in laying out the Library with Mr. Morris. I had charge of the rock excavation in the north-west part of the building, but I took no measurements.

Mr. Morris directed the work. I am unable to speak of the depths of the rock foundations, for I took no measurements. I saw Mr. Grist measuring the excavation, but I never saw Mr. McGreevy or any one for him. I never laid out any of the walls. Mr. Morris laid out the front of the building, from east to west, and the centre line of the building, from the Main Tower to the Library. I began the mason-work of the Parliament Buildings. None was done till I came, and I began with the Library. I built the north-east eighth part, I should say, of the foundation walls; then the foundations of the ducts through the Library, and a part of the south-east, and south-west foundation. Then I began some time in May or June, to work in the Boiler House, which had been excavated. The drain had been excavated as far as opposite the west wing of the building, but how deep, I cannot say. The excavation was continued until it was completed, except for a short time. I built the boiler house, as high as the first flight of steps. I never measured the excavation for Mr. McGreevy, nor saw it done. I never made any return to him of any measurement of excavation. I never laid out any wall, and I never had any plan. Mr. Morris gave me the main lines, west of the boiler house, and the lines where the piers are, in the Legislative Assembly lobby. I built them according to the lines given by Mr. Morris. Mr. Morris came with Mr. Haycock, and gave me the main lines in front of the building. and from the south-west front of the west tower, to the north-west angle of the building, Mr. Grist gave me the walls of the court yard, in the west wing. When I was at a stand with my men, I would go to Mr. Haughy, he would say he did not know. I would then go and work on other walls, till Mr. Haughy gave me other lines, and I would commence on them, and see Mr. Grist, who used to come and see what I was doing. He inspects the work, and measured the walls, and if anything was wrong, he would go with me to where Mr. Haughy had plans.

They would compare them, and see whether they were right. I spoke to Mr. Morris once about lines for a wall from the court, he said he had no right to give me lines, and I never asked for them again. When I left the boiler house, I worked on the front wall, east of the tower. Mr. Morris told me to thicken that 6 inches. I did it. I kept no memorandum of the thickness of any walls, all I remember is, that I did as I was directed by Mr. Morris. Mr. Haughy laid out some walls in the saloons. I cannot make eference to any walls Mr. Grist directed me to lay out, but there are several he id direct me to lay out. I cannot call to mind any wall in particular, there are o many—but he did lay out some under the Legislative Assembly, and some in

the west wing. Mr. Haughy laid out a good number of the walls for me, but I would refer to Mr. Grist, who would direct a ten or twenty foot rod, to measure the openings, to see if the apartments were in their right places. He stopped me on four or five occasions to see that they were right. He would go to the east portion, which was finished, and measure them, and come back and make those on the west the same. I now refer to the walls in the saloons. I cannot call to mind any walls except those I have spoken of, Mr. Morris laid out. I cannot speak of the width of the excavation in front of the building, for I took no measurement of it.

(Signed,) PATRICK MCMAHON BURNS.

9th SEPTEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

HEWITT BERNARD, sworn.

I am chief clerk in the Crown Law Department of Upper Canada, I have been so since May 1859. About the end of November 1859, I was instructed by the Department of Public Works, to prepare a contract between Her Majesty, and Thomas McGreevy, for the Parliamentary and Departmental buildings at Ottawa. I put in the memorandum for drawing the contract, which I received from the Department of Public Works, it is exhibit No. 38. Upon it I prepared a draft contract which I sent to the Department of Public Works, and about the 1st or 2nd December, I received it back with another memorandum from the Department, to prepare two separate contracts for the public buildings. I put it in, exhibit No. 39. In the instructions in the paper marked No. 39 this paragraph is contained. "The schedule of prices submitted to be taken on the understanding that if the total quantity of work calculated at these prices, exceeds the contract prices of $622.918, then these prices shall be reduced *pro rata*, for all the purposes for which they were required." After I had received the second memorandum I altered, and adapted the draft to the changed circumstances, and sent it again to the Department of Works. I understood at the time that the draft was submitted to Mr. McGreevy, and that his lawyer made certain objections. That the Commissioner of Public Works submitted the draft, and Mr. McGreevy's objections for the consideration of the Executive Council, that when before them, the law officers of the crown settled the draft, and an order in Council approving of the draft so settled, was passed on the 7th December (Exhibit No. 40.) The objections of Mr. McGreevy I put in (Exhibit No. 41.) I had the contract as thus settled, engrossed for the Department of Public Works, and I examined the engrossment with the draft, and having attached the papers referred to in the contracts as being attached, sent then to the Department of Public Works, with a letter dated the 7th December, a copy of which I put in (Exhibit No. 42.) I suggested either to the Hon. Mr. Rose, or to Mr. Keefer, that I had better be present and see the contract executed, to see that the papers were properly certified and witnessed, and I was present, and saw the contract for the Parliamentary building executed by the Commissioner, Mr. Rose, and by Mr. Thomas McGreevy, the contractor. I am the subscribing witness to it. I attested the papers attached to it. I look the schedule of prices attached to it marked C. It is signed by Thomas McGreevy at top and bottom, and on the top is this memorandum made by me before he signed it. "Schedule C. referred to in he annexed indenture, and to be con-

strued and read as part thereof, and as embodied therein, and forming part of the said indenture." I now look at the contract between Her Majesty the Queen, and Messrs. Jones, Haycock & Co., I say, I saw it executed by the Hon. Mr. Rose, and by Ralph Jones one of the contractors. I am the subscribing witness to the execution of the contracts by them only. I look at the schedule C. attached to it. It is the schedule of prices. I saw it signed by Mr. Jones, and before he signed it I had made the following memorandum upon it. "Schedule C. referred to in the annexed indenture, to be construed and read as part thereof, and as if embodied in the said indenture. There was no protest made by either Mr McGreevy or Mr. Jones, to the Schedule of prices attached to the respective contracts or anything said in objection to it, in my hearing, when the contracts were signed. I understood while the negociations were going on, there had been disputes about the prices with Mr. McGreevy, but I understood they had been all adjusted, when the contracts were signed. I had the printed form of contracts usually adopted by the Department of Public Works, and I had the conditions attached to the specifications, when I prepared the draft of the contract, and I embodied them in the draft, and struck out the conditions in the specification attached to the contract for the Departmental buildings, and I detached them from the specification, for the Parliament building, and so the respective specifications now appear.

(Signed) H. BERNARD.

The Hon. JOHN ROSE, Sworn :

I was Commissioner of Public Works from the month of January 1859 till the beginning of June 1861. When it was determined to construct the public buildings at Ottawa, it was also determined to let the contracts for their construction, to public competition, and notices to contractors were issued with that view. I understood that the tenders were to have schedules of prices attached, such as were printed and distributed with the forms of tender. The tender of Mr. McGreevy had no schedule of prices sent in with it. The tender of Charles Peters had a schedule so far as I recollect, but the Council having the matter before them, awarded the contract to Mr. McGreevy, but required that a schedule of prices should be prepared by him, to the satisfaction of the Department of Public Works.

So far as I recollect, the Deputy Commissioner was directed to see that Mr. McGreevy sent in a schedule of prices, in compliance with the conditions of the order in Council. I have no recollection of seeing the schedule, but the Deputy Commissioner reported that the schedule had been adjusted between the Department and Mr. McGreevy. There was no distinct agreement between me and Mr. McGreevy, or any of the contractors in regard to prices, apart from the written contract. I made no agreement with Mr. McGreevy before the contract was signed, that the schedule of prices should not apply to extra or additional work, though I may have expressed an opinion to him or the Deputy Commissioner that if there was extra work it should be paid for at fair prices. I cannot say, however, that I have any distinct recollection of stating this. I certainly never intended that Mr. McGreevy should have any advantage over any other one who tendered, and who put in a schedule of prices. I never contemplated any extra work without a written order. I thought the contract had so provided for it. I never intended to make, and I never made any arrangement, except what is of record formally in the Department, by which the express terms of the contracts were to be altered. I say that there was no distinct or definite arrangement to my recollection, between me and Mr. McGreevy to dispense with the schedule of prices, as applicable to extra or additional work, which should deviate from, or control the terms of the contract either before or after it was signed.

I was not aware till towards the end of the year 1860, that extra work, to any unusual or extraordinary amount had been done. My attention had not been specially called to it. I was but the political head of the department. It was the duty of the deputy Commissioner, and the assistant Engineer and Architect, to see that nothing was done, but what the contracts or orders of the Department warranted.

When my attention was called to it about the 29th December, 1860, by Mr. Page, in his letter of that date, (See blue book, pages 246 and 247,) I made a memorandum in my own writing which expressed my views. It is in these words. "Irregular to refer to supposed verbal authority. I have no recollection of any special communication with reference to this, except that I may have said I thought it reasonable the contractors should be paid a fair price for extra work. But architects are responsible for their progress estimates being in accordance with terms of contract, and it was never intended to deviate from the contract. Do progress estimates show how much extra ?"

I expressed the same views in my report to Council on the 16th May 1861. I have no personal recollection of the letter of the 23rd March 1860, to Messrs. Fuller and Jones, respecting the schedule of prices, though I may have seen it. If it is meant by the question which is asked, whether any private arrangement as regards the prices to be allowed for extra work, was made with Mr. McGreevy varying from the terms of the contract, I have no hesitation in saying, that I never intended directly or indirectly to convey such an impression to him or any one else.

I had no private communication whatever with him, and I cannot recal to my recollection that I had any official interviews with him before the contracts were signed. I made it a practice whenever practical questions came up, to have some one or other of the professional officers of the Department present at official interviews. As regards extra work I knew there could be none, without a requisition or written order being given, and then I never contemplated that it could be to any great extent. Having this idea in my mind, my particular attention was not given to the schedules, which I have since seen provide prices for extra as well as contract work. I do not think I was aware of this until the autumn of 1860. It is quite possible, though I have no recollection of it, that I may in conversation have at some time or other expressed the opinion that if there was extra work, its actual value should be allowed, whether that value fell short of, or exceeded the contract price; but if the contract made other provision for extra work, I should certainly say the contract should be adhered to.

I most distinctly deny having on my part had any verbal understanding with the contractors as to prices or anything else, at variance with what I supposed were the terms of the contract or schedules, and it is absurd to suppose that any verbal communication with any head of Department could control the formal stipulations of a written contract. I cannot say from my own knowledge whether it is usual that schedules of prices apply to extra as well as to contract work. I did not suppose there would be much extra work, and it is quite possible that I may have expressed the general opinion, that if there was it should be fairly paid for, and it is equally possible, that on the supposition that there was no contrary provision in the contract, I may have said so, if the question came officially before me. I considered the question of extras of less importance, as I did not contemplate they would be very great, and I never meant to authorize any extra work whatever without previous reference to the Department, and having the cost ascertained before-hand, as will be seen has been generally done.

Every officer in the Department from the Deputy down to the lowest clerk, is at liberty so far as my consent is necesssary to state everything connected with these contracts, or any other official business during my administration of the Department of Public Works.

(Signed) JOHN ROSE.

FREDERICK PRESTON RUBIDGE, sworn:

I am assistant Engineer and Architect for the Department of Public Works. My duties as regards the progress estimates of these buildings were to compare the amounts of work, and prices sent in, with the contract and schedule of prices to see that there was no deviation from the contract prices. In the first two I received there were no extras and no remarks made. When the March estimate was received and examined, I found extra work charged at rates, which on comparing with the schedule prices attached to the

contracts for both buildings, did not agree. I referred the matter to the Deputy Commissioner, Mr. Keefer, and to my surprise, I learned from him that the schedule prices were not to be applied to extra work, and upon this information, I made the memorandum on the March estimate, "No schedules prices given, the rates being determined by the local "judgment and experience of the resident architects, and clerks of works, and are taken "to be fair and just," and this memorandum embodies what I understood him at the time was to apply to extra work. As the subsequent estimates came in, I took it for granted the prices charged for extra and additional work were correct, and I signed them as vouching for their correctness as to contract work, and for the correctness of the calculations of the extra work, but not as approving of the prices of the extra work, for I had nothing to guide me, On the 21st June, 1860, after I had received and examined the supplementary estimate for the Departmental buildings for the month of May, and discovered the vast amount of extra work, and varying and increasing prices, charged for it, for which I knew of no authority, I made a memorandum in writing to the Department which I pray may be read. In this memorandum I couched my desire to the Commissioner in terms as respectful as I could, my wish to be relieved from the duty of signing the estimates as vouching for the correctness of the extra and additional work.

This memorandum the Commissioner had under his notice, for on the back of it, I find his reference of it to the Deputy Commissioner, and I find also the report of the Deputy Commissioner upon it, which I pray may be read. (Exhibit No. 49.) Soon after, the Commissioner to the best of my recollection, told me I should still be required to sign the estimates. I am the more confirmed that the Commissioner himself so directed me, from the fact that in my report to the Secretary of the 20th November, which I pray may be read, I find that I say my signing these estimates as desired by the Commissioner, must be taken merely as a proof that I have compared the present with the foregoing estimates, regarding the amounts to be paid. I pray this to be read with the references thereon 57, 58, 59, 60. 57 is my report; 58 Mr. Keefer's endorsement theron; 59 Mr. Rose's endorsement; 60 Mr. Page's. I called the attention of the Department from month to month, to the large and increasing expenditure on extra work on these buildings, and I made my reports to justify myself, for no one seemed to know anything about them, and when the Commissioner himself at last became aware of the magnitude of the expenditure he seemed much concerned.

Extra work 100 per cent over the contract had been sent in from time to time, and I was surprised. I cannot say what he said on any of the occasions, but I know when my last report of the 20th November was before him, his own endorsation on the back refers it to Council, with a view as I understood to its investigation. On some occasion I cannot say when, when the matter was being talked over, he said he had spoken of there being no objection to fair prices for extra work, but he had never authorized any departure from the schedule prices attached to the contract. I never heard anything from the Commissioner that he had authorized a departure from the schedule prices. The only one who ever did so was the Deputy Commissioner, who said it was understood the schedule of rates was not to apply to extra and additional work, but the prices were to be determined by the architects. I know nothing of any arrangement with Mr. McGreevy to do this, or anything except the letter of the contract. I think a week or ten days, at most a fortnight, according to the force employed, could have determined any questions as to the sites and foundations of these buildings. I see that the architects were instructed as to the plans of the Parliament buildings on the 9th September, and as to the Departmental buildings on the 14th September, and they were required to have them made and sent in by the 10th October. I do not see that it would have hindered them materially in making their plans and specifications, if they had been requested to furnish the Department with the block plans of the buildings, and not to make the sections for the foundations or specify for them, until the sites had been fixed, and the foundations tested. There was time to do all, if it had been determined to do it. There was little reference to me about these buildings.

The Deputy Commissioner and the Architects managed it themselves. I think it would have been prudent to have sunk test pits, and exhibited the actual, instead of an assumed foundation line to tenderers for contract. My own impression was, there would

have been no difficulty about the foundation of the Parliament Building, for I supposed the rock was near the surface on that part of the ground. I had formed no opinion of the sites of the Departmental Buildings.

From the time the plans were selected till the end of May, 1861, I had never gone near the buildings. On the 20th May, 1861, I received instructions from the Department, which I put in and read. (Exhibit No. 61, Departmental No. 36,844.) Also, order in Council of 15th May, Departmental orders 15th and 16th May, 1861, and the report of the Deputy Commissioner of the 17th June. (Blue Book, pages 327 to 333.)

I went to Ottawa in the end of the same month, and remained till the end of June. Mr. Keefer was with me the greater part of the time. I did everything he desired me to do, and after he left I made preparations for an independent measurement of all the extra work which had been done on the buildings, and had obtained the plans and cross sections so far as I could, and had made some measurements on the air ducts and drains in the western Departmental Building, when the Hon. Mr. Cauchon came into office, and the order in Council under which I acted, was rescinded in August. Soon after the contracts were entered into, and in the end of May, 1859, Mr. Keefer told me that on going over the number of rooms required for the different Departments, 7 were omitted by the architects, and 9 were required, 16 in all, and wished me to extend on a plan, the north return of the east front of the western Departmental building. I pray to have read Mr. Keefer's report, (Blue Book, pages 269, 271.) I did so but my suggestions were not carried out, so far as I know, but I understood additional room had been provided in the basements.

After my return to Quebec in June, 1861, I found an estimate, I think the July one, for the Parliament building, without the architects' names, it had the name of Mr. Bowes. I declined to sign it, as the contract required the architects' names to it. I am of opinion that the style of architecture of these buildings is not the most suitable for this climate. The breaks and angles in the walls and roof are objectionable, on account of the water and ice. I did not think they were the style the advertisement called for. I drew the advertisement at the request of Mr. Rose, and it contemplated rigid economy not ornate, but plain, like the better style of buildings in this country. The notice is in the Blue Book, page 9, which I pray to have read. I am not aware of any preliminary or other estimates being prepared by the Department except those in Blue Book, pages 1 to 10. I have with me the original description of the Parliamentary buildings, accompanying the premium designs. I put in a copy (Exhibit No. 62.) I refer to the architects' description of the adaptation of the building to the site, and the heating and ventilating. I have also the original description of the Departmental buildings, accompanying the premium designs. I put in a copy, (Exhibit No. 63.) I considered the Parliament building could not be built for the appropriation. I thought the Departmental buildings might be built for the sum appropriated for them. The reasons why they have not been done for the money are, the extra foundations, the introduction of heating and ventilating, and the drainage and work connected with these. There was provision made for heating and ventilating in the original designs, which should have been sufficient under the limited appropriation, till the Legislature provided another system. The altering of the premium designs to the contract plans, was not submitted to me for any revision. I had nothing to do with the tenders for the buildings. I do not know why. I saw wrong walls when I was in Ottawa. I consider it the duty of the architects to furnish figured plans from which the clerk of works can work without mistakes. I think it is the duty of the architects, in intricate buildings like these, to see that the walls are in their right places. For example, if any mistake occurred in the Buttresses of the Library, the whole groining would be wrong. I think it was their duty to see that the foundation walls were right. I think, the 5 per cent remunerates them for this, as well as for measurements. The clerks of works make the measurements, but the architects are responsible that they are right, and their signatures to the estimates vouch for their correctness. I do not say they should measure every trifle, but they should know the measurements are correct. If the architects felt that the appointment of the clerks of works was not in accordance with the known rule of the profession, they should have protested against it; if they did not, they are responsible for the measurements and the proper supervision of the work. If, as I am informed, there is an omission of the chases for water and gas supply, it is a serious one. When

schedules are attached to contracts by which the prices of extra and additional work is to be valued, they are adhered to in the Department, and it is the general rule of the Department to have them. The use of the schedule of prices is very obvious, it shows the basis of prices under which the contract is taken, and it shows the prices at which extra and additional work is to be performed, so that when the quantity of work has been ascertained, there is no room to dispute about the price.

(Signed,) F. P. RUBIDGE.

10th SEPTEMBER, 1862.

MEMBERS PRESENT :

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

SAMUEL KEEFER, recalled :

In answer to the question why it was that the prices mentioned in the Schedule attached to the contract were not to apply to extra and additional work which was left unanswered, I now say distinctly that the arrangement made between Mr. McGreevy and the Commissioner was, that extra and additional work, not included in the contract, was to be paid for at fair prices, and that the schedule of prices was to apply only to the contract work for progress estimates, and I say that in view of this, the ordinary form of contract was not used, and the clauses in the body of the contract, as I understood it, are so drawn, as not expressly to apply extra and additional work to schedule C, which is the schedule of prices, but they are expressly drawn to apply to progress estimates. I refer to the first section of the 13th clause of the contract as expressly applying the progress estimates to schedule C. and I refer to the 4th section of the same clause, where it is said that "if any change, alteration or addition shall entail extra expense on the contractor either in labour or materials, the same shall be allowed to the contractor," omitting the words "upon the basis of the schedule of prices hereunto annexed marked C, and upon none other basis or scale," as mentioned in the first section of the said 13th Clause.

It was well known then that the schedule of prices did not represent the actual value of the work, but fell short of it by a large per centage. If applied to the extra and additional work done by the contractors it would not pay the "extra expense," which I understood this clause to authorize. I now refer to the objections of Mr. McGreevy's lawyer to the draft of the contract marked No. 41. I had those objections in my possession while the terms of the contract were being settled. The answers in the margin thereof, in pencil, are mine, and in my hand writing. Looking first at the objection to paragraph No. 5, "Is it just that the contractor shall be bound to keep insured the building and materials to the amount of 75 per cent during the entire progress of the works?" my answer is "Yes," on the margin. Looking at the objections to paragraph No. 10, which are, "If any changes, alterations or additions (which mean extras, and which idea ought not to be entertained at present by the Commissioner) shall happen during the progress of the works, is it fair that the Commissioner shall have the right to fix the prices for which these extras shall be made?" my answer is "Yes," on the margin. Looking at the objections to paragraph No. 12, which are "if, during the progress of the work, there shall arise any difference of opinion as to what is to be considered as work included in the contract, although not specified in said contract, is it fair that the decision of the Commissioner on any such difference of opinion, shall be taken as final?" my answer is on the margin "Yes."

Looking at paragraph No. 13, the objections in which are, "If any difference of opinion shall hereafter arise as to the interpretation of the contract, is it just that in such an event the decision of the Commissioner shall be final, and that the Contractor shall be called upon to waive any claim for arbitration": my answer is "yes, the Commissioner has no direct interest in the matter, only do justice between the Contractor and the Government."

Looking at the last objection, "another paragraph marked No 3, being the last clause of the proposed draft of contract, is injurious to the Government and would ruin any contractor." I say that on the margin at the foot of this, is this memorandum in the handwriting of Mr. Rose: "This last, for consideration of Attorney General," and bears the initials J. R, of Mr. Rose.

I refer to the letter of the Department to Messrs. Fuller and Jones, of the 23rd March, 1860, when no extra work whatever had been returned to the Department requesting them "to transmit at their earliest convenience a schedule of prices, at which the extra work at the new Parliament Buildings should, in their opinion, be returned and paid for in the progress estimates"; and I refer to the letter of Messrs. Fuller and Jones, in reply thereto of the 30th March, 1860, in which they say that they had the honor to lay before the Commissioner of Public Works the following prices fixed for extra work on the Parliament Buildings, and at the same time begged him to state that it was impossible to fix with any degree of accuracy a complete schedule of prices until the works were further advanced:

Excavation in rock not exceeding 5 feet in depth	$1.25
Do below foundation depth	1.90
Masonry in foundations and backing, per toise	8.00

I say that this letter of Messrs Fuller and Jones was referred to me for report, and on the back of it I made the following report:—

"After seeing the work and discussing the prices with the architects and clerk of works, I have agreed to these prices as fair and just for the extra work, and the estimates will, in future, be made at these prices."

Upon the back of the letter is written the word "Approved," by the Hon Mr. Rose, and his initials are put to it. A copy of the letter of the Department is put in, marked, exhibit No. 43, and a copy of the letter of Messrs. Fuller and Jones is also put in, exhibit No. 44. The prices mentioned in this letter are the prices at which the extra work was rated and allowed in the March estimate, which was received by the Department in the beginning of April, after I had had an interview with the architects at Ottawa, referred to in that report. When I made the memorandum on that estimate "the schedule of prices does not govern extra work"; I supposed the contract had been drawn to meet it in accordance, as I understood, with the arrangements between the Commissioner and Mr. McGreevy.

I see by my instructions for the drawing of the contract to Mr. McGreevy when he was sole Contractor, and for the drawing of the contracts when they were divided, that I speak of schedules of prices to be attached to the contracts without restricting them to progress estimates only. I cannot now account for the omission. I knew the con racts were intended to be drawn so that the extra work should be paid for at fair prices, and that the Commissioner himself so understood it. I now refer to, and pray to have read, the letter of the Secretary to Messrs. Stent and Laver of the 7th February, 1860, (Exhibit 45,) desiring them by order of the Commissioner to furnish him with an estimate in detail of the quantity of masonry; the prices at which the extra work is estimated, and to the letter of the Secretary to them of the 8th March, 1860, which I pray may be read (Exhibit No. 46). Also the letter from the Secretary to them of the 23rd March, 1860, which I pray may be read, (Exhibit No. 47,) and the letter of the 16th June, 1860, from Stent and Laver, to the Secretary, and of the 21st June, 1860, from F. P. Rubidge to the Secretary, with a report from the Deputy Commissioner to the Secretary, dated the 25th June, 1860, which I pray may be read (Exhibit No. 48.) Also the letter of the 1st February, 1860, to the Honorable Commissioner from Stent and Laver, with a note of my own on the back of it, which I pray may be read (Exhibit No. 49.) And a letter from Stent and Laver to the

Commissioner, dated the 28th February, 1860, which I pray may be read (Exhibit No. 50.) And a letter from Stent and Laver to the Commissioner of the 12th March, 1860, which I pray may be read (Exhibit No. 51.) Also a letter from Stent and Laver to the Secretary, dated 14th April, 1860, (Exhibit No. 52,) which I pray may be read. And a letter of the 28th June, 1860, with a memorandum on the back from Stent and Laver to the Secretary, which I pray may be read (Exhibit No. 53.) And a letter from the Secretary to Messrs. Stent and Laver, dated 11th July, 1852, already put in (Exhibit No. 33,) which I pray may be read, and a copy of an order in Council, dated 15th May, 1861, which I pray may be read. (See Blue Book, page 327.)

In accordance with received practice, and in fairness to the profession, the successful competitors were employed to carry out their own designs, and they were to receive the usual professional allowance of 5 per cent on the contract for the performance of this duty. It would be their duty to prepare detailed working drawings, to lay out and superintend the works, to make the monthly progress estimates for the contractors, and to be responsible for their correctness, to report progress to the Commissioner, and make special reports to the Commissioner whenever called upon.

To aid them in this duty, clerks of works, and afterwards when it became necessary measurers, appointed and paid by the Department were placed under their orders, to see that their plans, and the orders to contractors were faithfully carried out; to assist them in laying out the work, and in making up measurements and estimates. By this arrangement, the Architects were placed in the entire charge and controul of the works, under the Department, and were made responsible as well for their proper execution in conformity with the contract plan, as for the correctness of all measurements and estimates given under their hands, especially for the monthly progress estimates, which by the contract they were authorized to make.

It is clear from page 250 of Blue Book, that it was in this light, Mr. Stent understood his duties, when he says, "our arrangement with the Department embodies a guarantee for the correctness of the measurements and calculations, made upon the work during its progress and at its completion."

After having secured, as it was thought at the time, the best architectural skill, and practical knowledge in the country, it was expected that the works would be conducted in a thoroughly efficient and practical manner. The prize plans gave evidence of architectural ability. The University of Toronto, nearly completed, then under the superintendence of Mr. Morris, as Clerk of Works, was considered his best recommendation.

He was appointed and paid by the Department; accepted and approved, by the architects. They were informed of his appointment 10th and 12th December, 1859. (See Blue Book, pages 131 to 134.) And that until the building would be commenced in spring, it was thought he could attend to both the Parliamentary and Departmental Buildings during the winter, plainly implying that more assistance would be given them when asked for, and required. When assistance was asked for, it was given, though not so soon as required.

The Chief Engineer recommended the appointment of measurers, and it was done. On several occasions during the progress of the work, Mr. Fuller expressed, as I thought, very strange views about his duties. I combatted them earnestly as inconsistent with his position, and responsibility as Architect in charge. He said that Mr. Morris assumed too much authority; but, as he was under his orders, it was his own fault if he permitted it. It is true Mr. Morris corresponded with the Department, but it was in relation to matters concerning the grounds, which had been put under his care, and in reference to his setting more clerks of works on the buildings and laying the foundation stone.

Mr. Fuller contended it was not an architects duty to lay out work for the contractors. I said I did not see how he could rest satisfied a day until he had seen that the lines, and dimensions were right. That if he did not do it himself he was bound by every obligation, to check the work after it was done, to be sure that it was right, and I remember instancing my own practice on canals, of not delegating so important a duty as that of laying out a lock to any man whatever, seeing that I was responsible, and he stood, as I

conceived, in the same relation to these buildings. He would not be convinced by my arguments and I began to fear he would become impracticable. When I was here in May and June, 1861, he must have been convinced that he had acted unwisely, for it was then that I discovered some walls in wrong positions, and he began measuring when it was too late, and did his best to adjust the upper walls on these incorrect foundations. He had furnished measurements of the work done, in foundations. When I appointed Mr. Bowes as measurer on his building, and sent Mr. Fuller a copy of his instructions, he was offended because I had not instructed Mr. Bowes to verify the measurements he had previously given. After Mr. Page's report had been received, it was brought under the notice of His Excellency the Governor General, on the report of Mr. Rose of the 14th May, 1861, and on the 15th an order in Council was made upon it, and on the 16th an order from the Department to me, which I pray may be read. (Blue Book, pages 322, 328.)

I and Mr. Rubidge came to Ottawa on the 27th May, and remained till the 7th June, when I was recalled in consequence of a change which was about to take place in the head of the Department. Mr. Rubidge remained. On the 17th June I made my report, to which I refer—and pray to have read (Blue Book, page 329.) I then believed I had made the arrangements so complete as to the carrying on the works, their supervision and measurements, that they could be carried on till the end of the building season, with the balance of the appropriation then on hand.

When the Hon. Mr. Rose resigned on the 13th day of June, there was in hand of the appropriation $327,986.75, to which $200,000 were subsequently added by two orders in Council, as I understood.

Mr. Cauchon came into office, the same day Mr. Rose left, and although I repeatedly offered my services to him, in regard to these buildings, and the general business of the office, I never had anything to do with them, after his coming in except to advise as to the completing the boiler house on the 17th July, when Mr. Garth came Quebec about it.

I was not aware that chases had not been left in the walls of these buildings for gas and water supply. It was the duty of the architects to see that the specification and plans were made out for them. It is not the duty of the Department to make plans. I think it was not my duty to look after this or any details of these buildings. This belonged to the architects. The architects of the Departmental Buildings made a mistake in not giving the number of rooms required in the statement of the accommodation, by seven; and the mistake was not discovered till after the contract was signed, according to my report of the 13th November, 1860. (Blue Book, page 164.) Sixteen rooms were required.

The only written order for the change in the eastern Departmental Building, is the order of the 10th December, 1859. On the 28th February, 1860, the Commissioner approved of the order of Messrs. Stent and Laver, in the blue book, page 226, which I pray may be read. All the other extra work in the east wing of the eastern Departmental Block, was done by the contractors without any written order, or any order. I certainly did not object to it, and it was returned in the monthly estimate which I saw. I knew it was necessary, and that it could be done at no better time than it was. The only verbal order I ever gave, was with reference to thickening the walls, and buttresses of the library, which Mr. Page thought still too thin, and upon his suggestion, I gave orders for a further thickening of the walls, and buttresses.

I made good this verbal order by a written one.

11th SEPTEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD. VICTOR BOURGEAU.

SAMUEL KEEFER, further examined:

I assume the responsibility of the Buildings as they are, apart from wasteful or erroneous expenditure, and the system of heating and ventilating. I think they will hereafter do credit to the Department and to the Province. I do not assume the responsibility of their management. I see no difficulty in having the extra work, under the assumed foundation line measured up, by sections of the Building to the contract line, and if this had been done, there would have been less room for dispute. There was a want of proper supervision at first, in regard to clerks of works; very prompt action cannot always be taken by the Department. Mr. Morris asked for assistance on the 31st March. Mr. Hutchison was appointed on the 17th April. Mr. Grist, on the 20th June. And Mr. Pelham was asked for on the 7th, and appointed on the 11th July. I cannot tell why there was no estimate called for, or arrangement made for carrying out the system of heating and ventilating, exterior to the Buildings, after the plans were matured. I only approved in April, 1860, of what had to be done inside the Buildings being proceeded with. In view of the appropriation for the Buildings, the system of heating and ventilating was not warranted, but I have already explained, that I never supposed the appropriation sufficient to complete the Buildings, for the reason I have already given. The brick-work in the Parliamentary Building done latterly is not good. It has been subjected to unfair exposure. Some of it must come down and be rebuilt, and more effectual means taken to prevent injury against the coming winter. There is no difficulty in distinguishing contract from extra work, in those Buildings. In their exterior and internal arrangements, except where erroneously constructed, and except the additional flues, the Buildings are in accordance with the contracts, and excepting the Nepean facing, about which there is no room for dispute.

I never contemplated construing the 6th clause of the contracts, as compelling the contractors to make flues for the heating the Buildings, as part of the contract, beyond what the plans showed. The first arrangement made with the architects, was made by the Government, who did not see fit to re-consider it. I considered the arrangement I made with them was superseded by the Order in Council. The arrangement I made was the customary one, 5 per cent on the outlay, but it was not approved by the Department. The whole matter is shown in correspondence. (Exhibits Nos. 54, 55, and 56.)

I understood from the signatures of the architects to the progress estimates, which were drawn to show contract and extra works on different columns, that they had satisfied themselves that the quantities of work therein mentioned, had been done, and correctly measured and returned; that the prices for contract work were in accordance with the schedule of prices, and the extra work at prices fair and reasonable, and no work returned which was erroneous or superfluous, and none of the contract work returned as extra. I have seen some walls in the Parliament Building too thick, and some in wrong places. The walls over their proper thickness, I call superfluous, so far as they exceed their proper thickness. Those in wrong places are erroneous. I was not aware that all the walls had been measured, and returned as they are. I was not aware that stone from the excavation had been returned in the estimates as material delivered; it ought not to have been done. I knew that the stone from the excavation had been used in part for the pick-faced masonry.

I have no knowledge of the certificates issued by the Hon. Mr. Cauchon, for the

money in hand. I never saw anything in the office to authorize their issuing. I should not have considered that certificates for warrants could be issued under these contracts, without estimates of work done, and materials delivered to justify their issuing. I do not think it was right to build a brick wall inside a stone wall, where the plan showed the brick-work to be part of the wall. It made it unnecessarily thick.

A contract was drawn in the office of the Department in the usual form, and submitted by the Commissioner for the approval of the Council. I learned from the Commissioner, that he had some difficulty with his colleagues, on the clauses in his draft of contract relating to extra works, and that he was on the point of sending in his resignation on account of it. Knowing that if he resigned, it would fall to me to execute the contract, I then told him that if a contract were prepared which he would not sign, then I would not sign it; and so the matter rested, I think for a day, when I learned that the contract would be drawn by the law officers of the crown. This was done.

I considered that it was the intention of the contract to pay for extra and additional works, at their fair value, and this is made apparent by the objections to the draft which were raised by Mr. McGreevy's lawyer. (See exhibit No. 41.) I think I was not present at the signing of the contract, and cannot say whether Mr. McGreevy made any objection to it or not, but certainly the attaching of the schedule to it, which is on a printed form with the words "as well as for alterations, additions, or works dispensed with," was not in accordance with his agreement, or with the 4th section of the 13th clause in the body of the contract. I cannot account for the fact that the contracts were signed without first striking out these words in the heading, for it was an error to leave them in. My attention was not directed to it until some time after the works were begun, and I think that my first note on the first estimate, which contained extra work, was written under the full belief that the contract warranted that memorandum of mine on the March estimate. From the first commencement of the extra works done, to the period of their stoppage, that is for the first estimate for March, 1860, to the last one for November, 1861, the prices paid in their estimates for the extra and additional works have been regulated, or designed to be regulated at what was their fair value, and not at the rates of the contract schedule. This has been done with the full knowledge and approval of the Commissioner, from the commencement of these works, down to the period of his resignation in June 1861, and he has directed Departmental action on various occasions in reference to the payment for these extra works. Not only has the interpretation which I have put on the contract, been acted upon all along with the full knowledge of the Commissioner, but also with the knowledge of the Government. After the Commissioner had communicated the Chief Engineer's report on the state of the contract, by his report to Council 14th May, 1861, (Blue Book, page 323,) and during all this time no objection has ever been raised to this mode of allowing for extra and additional work. On the schedule of tenders received by the Department, which I caused to be made, and which was submitted to Council, dated 15th November, 1859, I marked against Mr. McGreevy's tender the word "informal," as having omitted mention of fire-proofing, and a schedule of prices. No alterations were made but such as are specified in the list of questions and answers, which are attached to the contracts. They were made with my approval. Estimates of the value of the buildings by trades, were submitted by the architects. I have referred to them before, and no other. These were not official. Heating and ventilation to a certain extent had been provided for, as before explained, but neither gas nor water supply was embraced in the estimates further than the preparation for their introduction, as shown in the plans and specifications.

12th SEPTEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

SAMUEL KEEFER, further examined:

It was not known that the heating and ventilating would be attended with so much outlay. The Government was not informed of it till the Commissioner submitted the Chief Engineer's report on the 14th May, 1861. The Department was aware of what the estimates showed from time to time. It was the duty of the architects to have made the estimate for heating and ventilating, whether it was asked or not, before they embarked in it. These buildings are not the only work I have to attend to, as the Deputy Commissioner of Public Works. There are various other works, engineering and architectural all over the two Provinces to be looked after, such as roads, bridges, canals, slides, piers, harbours and light-houses. The Deputy Commissioner must necessarily reside at the seat of Government, and cannot be long absent from the duties of his office; and in the management and superintendence of these various works, engineers, architects and superintendents must be employed, and have local charges assigned them, and must have the confidence of the Department until they are found unworthy of it. I make these observations to show that it is impossible for the Deputy Commissioner to have his whole attention directed to these buildings.

(Signed) SAMUEL KEEFER.

13th SEPTEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

WILLIAM HUTCHISON, sworn:

I am Clerk of Works for the Eastern Department al building. I was a builder in Montreal for about 20 years. I assumed my duty as Clerk of Works on the 29th April, 1860 When I came, about 50 cubic yards of the front wall were built, and the excavations were made to the basement floor line. The boiler house was excavated to its depth, part of the clay excavation of the drain had been removed outside the building of the boiler house.

I acted under the instructions of Mr. Morris, who directed me as to alteration of sketches he had. I had tracings of the contract plans, and these were in an office where I had access to them. I laid out the walls, and they were correct when the basement walls were laid upon them. There was one wall only out of place, a foot; it arose from the sketch Mr. Morris gave me, being wrong in the figure, 1 foot, it was 24 by 8 or 9 feet. It was measured as an extra and a blunder. I measured for the progress estimates from

the beginning, and I measured for the Departmental buildings for the month of June, 1861, when Mr. Pattison came. I was told to measure for the month of April, soon after I came, and I continued to do so from month to month. I measured the excavation, earth and rock, and all the works, from the time I came till Mr. Pattison came. I gave the measurements and a rough copy of the estimate to the architects, and they added the prices and checked the estimates. When I knew the prices I added them myself. The architects set the prices. I measured all the contract work as such, and the extra work as extra. The day's work bills were always for the extras. The schedule of prices for the contract was adhered to as near as possible, but the schedule prices were never applied to extra work. There is not much difficulty in telling what is contract and what extra work in the buildings. I can show the extra work under the foundations, and I can show the extra work in every wall. The building has been substantially built according to the contract, and the additional work can be shown. During the construction of the building, labourers' wages were on the average 80 cents, masons $1.50 to $1.75, bricklayers $1.75, stone cutters $1.75. I cannot speak positively as to carpenters, but they rated from $1.25 to $1.50 per day.

I consider all the excavation for the eastern block worth 25 cents a yard. Rock excavation in foundations is worth $1.50, one depth with another. There was a great deal of rock excavation in the drain. The rock excavation in the main drain to 20 feet deep is worth $2, and from that to its depth $3 per yard. The pumping extra. The branch drains the same. The ducts are on the top of the drains, wherever they could be so placed. The excavations were not too wide, some had to be widened. The rock from the excavation was good for rubble masonry, and cut-stone for ducts, and inside work. It was a little rough.

I always measured the rock from the excavation, as material delivered every month. I measured it, and the architects allowed 54 feet to a toise at 87 cents. I got the working plans from the architects. There was great difficulty in getting detailed plans. In my opinion a contractor ought to have his detailed plans at the commencement of the building. The loss to the contractor is this, if he has all his moulds, he can cut up his blocks to advantage, if he has them not, he will often have to lay aside pieces of block till he can use them. The masons had often to be moved from one place to another, to work till the plans were ready. If men are pushed the work is never so well done, and they were often pushed from this cause. In some cases they were so hurried that the stone would be built in the wall, not rubbed, as it should have been, and so even affected the measurement. Nine-tenths of architects do not give plans when they ought, and these architects were not the exception. I have got plans for a building all at once; and in a contract of $48,000, there was no extra work, from all the plans being complete. It is too often the practice of the architects not to have the plans. I always tried to carry out the orders of the architects, and Mr. Morris, although I had differences of opinion with them. We differed chiefly about the construction of the roof, and they had their own way. I thought mine was the best, and still think so. The foreman of the contractor had to make nine-tenths of the detailed drawings, and submit them to the architects for approval, in order to have them in time. I am acquainted with the modes of measurement in Montreal. I built the banking building of the Bank of Montreal, the Bank of British North America, the St. Andrew's Church, High School and St. Patrick's Hospital, and a great many private buildings in Montreal. I built Chalmer's Church, and and the banking house of the Bank of British North America in Quebec. I was engaged to superintend and did superintend five of the banking houses in the Upper Province. I managad them as I saw fit. I do know the prices and value of work. Rubble stone masonry is measured in Montreal by the toise of 86 feet, cut stone by face measure. Openings are all measured in rubble masonry, but deducted in cut stone and brick work, including flues. Rubble masonry, such as is in the foundations of these buildings, can be done in Montreal for $6.50 to $7 per toise of 86 feet. A toise of 54 feet would be a third less, $4.33 to $4.67. In Montreal rubble stone and lime are 20 per cent dearer than in Ottawa. Sand is cheaper in a greater proportion.

In buildings like these a contractor cannot get the same amount of labour out of the men employed as he can on small buildings. The rubble masonry in these buildings,

from foundation to top of the lowest part of the main cornice, is worth per cubic yard $2.67 or $5.34 per toise of 54 feet, or about $8.50 per toise of 86 feet. For the first 10 feet above the cornice 10 per cent, for the next 10 feet 15 per cent., and 15 per cent, on every 10 feet, far as any height of tower on the Departmental Buildings goes should be added.

The main tower of the Parliament Building would cost more as it went up. The masonry in the ducts and drains, measuring the face work as rubble, is worth $2.44 per yard, deducting openings, or $4.88 per toise, of 54 feet. These prices include the measurement of the cut-stone facings, and openings in the buildings, but exclude the openings in the drains and ducts, and all these prices include a profit of 20 per cent, to the contractors. The pick-faced stone work in the ducts and drains, is worth 25 cents per foot, face measure, including material. The actual cost of the labour is 10 cents a foot, but I add 15 cents for the material, and profit on the material and labour.

The arches and inverts, I value the same. They are worth 78 cents a foot, measured on the soffit. This includes the skewback. Labour is worth 40 cents, material, 25 cents. Profit on both, 13 cents, in all 78 cents a foot. The stone work in the boiler house, the average face of one foot, will require two feet of stone. The cost of a cubic foot of stone, is 25 cents. Two feet required for one of face, 50 cents per foot, of face. Dressing per foot, superficial, 20 cents, to which I add, 14 cents for profit, 84 cents per foot on the face. The arches in the boiler house, I measured the face and soffit, and I allowed fifty per cent more per foot than the plain faced work. The pick-faced arches, through the division walls, I put at 61 cents per foot, on the face. I measure the soffit and the face on each side. The arches will average three feet thick over the buildings. Each arch contains about 36 cubic feet, at 25 cents per foot. Cutting, 35 feet three-inches, at 25 cents per foot. The stone in each arch is worth $9. Labour, $8.81. Profit, $3.56, in all, $21 37 for each arch, or 61 cents per foot, superficial. The Nepean stone facing is worth 23 cents per foot, superficial.

The stone is worth when quarried, $7 per toise, of 216 feet, which will make 135 feet of facing. It will take 3½ loads to carry a toise, at $2.50, $8.75 a toise. The dressing of the toise which would make 15 yards, is worth $7.50, or about 5½ cents a foot. Pointing in the wall, 17 cents per yard, making $2 55, $25.80 is the actual cost of a toise of stone, and what facing it produces. To this I add 20 per cent, $5.16, making in all, $30.96 for 135 feet, or 23 cents per foot, superficial, in the wall, pointed and finished. Lime stone facing done in the same way, would have cost 16 cents per foot, superficial, 7 cents per foot is the difference between Napean and lime stone. I detail the lime stone, thus: A toise suitable for coursed work, would cost at the building, $8, dressing same as Nepean, pointing the same. The cost of 135 feet, is $18.05, to which add 20 per cent, $3.60, in all, $21.65. Ohio stone is worth delivered in Ottawa, 66 cents per foot, 25 cents at the quarry; and freight 15 cents; railway, 12 cents; cartage, 5 cents; contingencies, 3 cents; in all, 60 cents; 10 per cent to cut it up for the stone-cutters; in all, 66 cents. The dressing, plain faced, per foot, is worth 16 cents; plain circular work, 25 cents; sunk straight work, 18 cents; circular, 27 cents; moulded straight work, 35 cents; moulded circular, 45 cents; crandled and chiselled work, 16 cents; rubbing, plain faced, 3 cents; moulded work, rubbed, 7 cents; labour on quoins, 16 cents.

These prices for cutting make up the actual cost, and to them, to the contractor, I would add 20 per cent. Brockville stone, I value the same as Ohio—the stone costs less, but the work is more, and more waste. In measuring brick-work, the openings are excluded, but not flues here. The brick-work in these Departmental Buildings, is worth $12 50 a thousand, which includes a profit of 20 per cent. There were different sized brick in the buildings, when I measured them, there were 18½ bricks to a cubic foot, and this was a fair average. I measured the work for the progress estimates on the eastern Departmental Building, for the year 1860, and to June, 1861. Mr. Morris did not do it. I measured for the progress estimates as near as I could, but I re-measured the work for Mr. Page, as far as it was then done. The excavation in the main drain, was not wide enough at first, we had to widen it when it was determined to put three ducts over the drain. At first it was not determined how this was to be. The lowering of the excavation of the

boiler house, caused the drains to be deeper, so as to drain it. The floor of the boiler house mentioned in the contract, was to be four feet under the basement floor, and one foot for footings. The actual one is 10 feet under it, or 12 feet three-inches to the footings of the walls The excavations and drains, were made a little under this last depth. The stone taken from the foundations, was built in the rubble walls of the eastern building. There is none left in fact. The hard-pan is in the east wing. There was hard-pan in the bottom, and hard digging for four feet over all that part of the building. I stated what it was to the architects, and it was all returned as hard pan, I suppose. The deck joists are as they should be, the rafters are a little wider. I ordered some of them to be so. They are 14 inches apart, they were to be 14 inches from centre to centre. The iron joists are 20 inches apart, over the record rooms, instead of 14 inches as specified. I did not object to them, nor was my attention ever called to the distinction, which was this: Certain of the rooms called record rooms, were by the original specification to have iron joists, 14 inches apart. Then it was arranged that all the wooden joists were to be supplanted by iron ones, at 20 inches apart, and instead of making the parts, which were originally intended to be wood, with joists 20 inches apart, and the record rooms 14 inches, they were all made 20 inches apart. The iron joists could have been got delivered here at $80 a ton.

I never disobeyed the orders of the architects, but I sometimes wished my own way, and they wanted theirs. Sometimes I got it, sometimes they made me do theirs, which I should not have done, if I had been allowed to do as I wished. I do not remember, what the letters were about, of which the architects and Mr. Morris have spoken, but I recollect I could not understand them, and I carried them back to be altered, but Mr. Stent would not do it. I meant no disobedience of orders. I was ordered by Mr. Page when he was here, to make plans showing how the eastern Departmental Building was built, and I made them. When Mr. Page came, I showed him my measurements of the building as it was, in figures. He directed me to go and make plans of the work at it was, and I did it, up to the ground floor, showing what was contract, and what extra. I subsequently made plans of all the work. The additional work is on what we call the east extension, and was intended for the Bureau of Agriculture. As I understand, the lower room is 45 by 31 feet, and intended for a model room. I do not think this style of building well adapted to this climate, want of cave projection is the fault. The water is not thrown from the wall. The deep valleys are an objection and should be avoided. I do not think the want of chases for water, in the walls, a serious matter. You cannot in this climate have chases in the outer walls, and bells and gas can be put in the brick walls without much expense. I think all water and gas pipes, and bell wires should be as accessible for repair as possible, so as not to be unsightly.

The pins showing the centre lines of the building, were in when I came on the work. I omitted to speak of the prices of the hard-pan spoken of, the filling and ramming the two kinds of Nepean stone flagging, in the bottom of the ducts, the roofing and slating, and the branch drain. The excavation of the hard pan or the four feet hard digging is worth 60 cents per yard. Filling from spoil bank 20 cents per yard. The ramming was returned as extra days' work in the progress estimates. The Nepean flagging in the bottom of the air ducts is worth 8½ cents per superficial foot laid.

The flagging over the cold air ducts perforated is worth 56 cents per foot. This includes all the work on it, laid in its place. In the branch drain with the dish bottom, this bottom is worth 63 cents a foot face measure. The rough flagging covering it, is worth 10 cents. The sides the same price as ducts and drains. Plain slating is $8,40 per square, ornamental $9,60. The Ohio stone in the quoins in the building is worth 74 cents a foot superficial in the wall. Limestone is worth 44 cents, the difference is 30 cents per foot. All these include a profit of 20 per cent. The value of roofing is worth $21 a thousand feet, board measure, this includes lumber, boards, and labour.

15th SEPTEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q, C., CHAIRMAN,

VICTOR BOURGEAU, Esq., DAVID STARK, Secretary.

WILLIAM HUTCHISON, further examined:

The greater part, certainly over two thirds of the stone for cut stone in the sides of the ducts and drains, came from the excavation, but the stone for the arches is from the quarry in Gloucester. The dressed stone now on the ground is more than half from the excavation, the rest from the Gloucester quarry. The masonry in the ducts and drains except the rough arches, was chiefly built of the stone from the excavation, a very small part of stone brought from other quarries. Nearly two thirds of the rubble stone in the whole building, is from the excavations The lumber for covering the foundation walls as the work proceeded, and the time it took to cover them, were returned as extra work by order of the architects from month to month as the work progressed. This lumber was afterwards taken by the contractors, and so much allowed for tear and wear while it was used. The pumping of water from the excavations was also returned as extra days' work every month, in which pumping was done.

In buildings like these, the actual level of the ground should have been shown and test pits ought to have been sunk, before the plans were completed, and exhibited to contractors. The plans for heating and ventilating should have been matured and shown also, it would have saved a vast expense in extra work. The extra work was carried out with as much care as the contract work in the eastern Departmental buildings.

There was unnecessary expense in making the side walls of the hot air chambers thick enough to carry the joists. The joists ought to have gone over to the principal wall; this would have saved the wall from the spring of the arch, and saved the filling in above the spring of the arch to the floor, with concrete. The brick wall on Mr. Garth's plan showed the brick lining as part of the principal wall. As they are built the principal walls are wholly built of stone, and the brick wall against it, uselessly as I suppose. These walls are about 500 feet long in all. The foundation wall was 9 inches thicker to support the lining, and the lining and filling above the arch is superfluous.

The principal drain from the building over which all three of the air ducts, part of the way, and five the other part, are situated, runs nearly north from the building to the bank, 385 feet, and is in some places 30 feet deep in rock, while if the drain had been carried directly to the bank, its length would have been 177 feet, and the deepest excavation about 21 feet. The drains are now open at the bank and it is intended to lead the drainage, as I have heard, in pipes to the Ottawa river. The drains as they are now constructed are nearer the river than I think they ought to have been, but if the pipes are made of any material cheaper than silver, they cannot cost so much as the masonry. I never heard of any reason for making this drain where it is. The foundations in the rear wall of the west wing, and part of the tower, were stepped in the rock by stone cutters, at an expense of $313, extra days' work; it ought to have been done by quarry-men, and would have cost $50. This was done chiefly before I came. The stepping in the western Departmental buildings, I did with the quarry-men. The roof in my opinion is too heavy. It would have been better with 25 per cent less lumber in it. In the construction of the roof, I wish it stated, as the work went on, if my view had been adopted, the roof would have been finished to the main tower. As it is, only a small portion is slated, and the rest is covered with felting, in a temporary way, but at an expense of over $2000.

(Signed) WILLIAM HUTCHISON.

George Brown Pelham sworn:

I was educated an Architect, but followed the business of a Contractor. I have been clerk of works for the Western Departmental Building since the 25th July, 1860, but I was appointed on the 11th July. I was sent to assist Mr. Morris as assistant clerk of works. I reported myself to him on the 11th July, on my arrival, and he instructed me to go upon the Parliament Building for a fortnight or so, to look round generally, and then I should take the Western Departmental Building entirely to myself. I took charge of the Western Departmental Building on the 25th July, 1860; at that time the clay had been nearly excavated for the south and the west wings. The surface of the ground had been removed from the east wing between 3 and four feet, and a little of the rock excavation in the main drain, beginning at the river end. We completed the excavation of the two wings first and started the masonry on them. I had plans from the architects and plans from Mr. Garth of the cold air ducts, to enable me to start the masonry. I found the heating and ventilating showed a greater depth than the architect's plans. I asked Mr. Morris what I was to do; he told me to go deep enough in the basement to get rooms 11 feet 3 inches, and 2 feet 3 inches for the footings; I did so: these depths were about 2 feet 3 inches deeper in the back rooms than the contract plans showed.

The plans for the front part of the building showed no basement story, and the excavation in this was to be 4 feet for trenches for the footings of the walls; all wider and deeper than this was extra. I excavated the whole of the basement in front to a depth of 9 feet on an average over the whole area; this was all extra except the trenches for the footings of the walls to the depth of 4 feet as shown on the contract plans. At the west angle of the building the clay was 7 feet 6 inches thick, the rock 2 feet 2 inches. At the south-west angle the earth was 6 inches, the rock 5 feet 1 inch. At the south-east angle the clay was 8 feet 3 inches, rock 1 foot. At the north-east angle the clay was 7 feet 3 inches, rock 5 feet 3 inches.

The average depth of clay on the whole area was 6 feet; rock 4 feet. The length of the main sewer and ducts over it, from the boiler house to the edge of the bank of the river, is 368 feet; width at top average, 24 feet; depth on the average, 27 feet; deepest part, 29 feet; width at bottom average, 14 feet. The drain, when finished, was 2 feet 6 inches wide by 4 feet 6 inches high; top and bottom arched. This excavation was built up of solid masonry from the bottom to 6 inches over the arch stones of the drain, being an average of 9 feet. At this height the masonry was levelled off, and three cold air ducts set off upon it 3 feet 9 inches wide by 3 feet 6 inches high, flat on the bottom, arched on the top. Solid masonry between, to a height of 5 feet 9 inches, where the masonry was again levelled off, and upon it two more cold air ducts of the same size were set off and the masonry built on an average of 6 feet in height. The excavation thus completed contained the drain at the bottom, next upon it three cold air ducts, and next upon them two cold air ducts.

The plan L, I now put in, to show the plotting and the section of the drain, its length, width and depth.

The plan M, I now put in, shows the sections of the ducts over the drain, and the excavation and masonry, also a section of the drain and ducts as finished. I think it could have been constructed at a third less work than it was, but I am not certain, from the nature of the rock which laid at different and irregular angles against the run of the drain. I made the plans I now put in during the winter of 1860-'61, at the request of Mr. Page; there was no plan of it while the work was going on. Mr. Morris staked out the line of the drain and I directed the excavations. I generally took my instructions from Mr. Morris, sanctioned by the architects, but no measurements were given me. I was told to take the drain from the boiler house and give it a fall of 2 inches in 10 feet. I had no special directions as to width, but it had been commenced and I followed the width begun. I was directed to excavate the boiler house 13 feet below the basement floor line, and this was the depth of the bottom of the drain as it left the boiler house; the boiler house was pick-faced masonry. The drain and ducts inside the building were also pick-faced, but outside the drain was pick-faced and the cold air ducts rubble masonry, excepting 30 feet from the end where the sides and arches were cut stone. The bottoms of the ducts all

through were paved with Nepean flag stones. The stone from the excavation which was good was used for rubble masonry and pickfaced stone work; what was bad was taken west of the building where it now is; no part of it was measured by me as material delivered, but when it was built in the walls I returned it as masonry, and when it was dressed I returned it as dressed stone in the monthly estimates of work done. The stone from the excavation was used in filling up the excavation for the drains and ducts, and for the heavy work in the foundations.

Two-thirds of the rubble masonry in the walls in the foundations and basement of the building, were stone from the excavations, and the same proportion in the drains and ducts I should say that two-thirds of all the extra work in the foundations, ducts, and drains was made from the stone from the excavation. I measured, for the monthly estimates, up to the time Mr Pattison was appointed to do it, in June, 1861; I made the measurements as accurately as I could, and on a measurement in the winter of 1860–61, it was found my monthly returns were rather under than over. The contractor's foreman laid out the walls but I checked them, and they are correct in the western Departmental Building.

The excavation in the main sewer and ducts was completed in 1860; I began the masonry in them and the boiler house in March, 1861. The walls in the boiler house are 4 feet 6 inches at bottom, 3 feet 9 inches at top, they batter 9 inches. The boiler house masonry is of large stone from the Gloucester quarries—there may have been a few from the excavation. The average number of feet of pick-faced masonry done in winter, was from 10 to 12 feet per day a man, face measure. The men were working by the piece; I think they got from 10 to 12 cents a foot, but I cannot say; it was done by masons who had been on the building and whom the contractors wished to keep on during the winter. I am not acquainted with the general mode of measuring work in this country, but, I believe, in Ottawa it is face measurement. The division walls are thicker than the plan shows. Mr. Morris told me the walls were to be of the same thickness as in the eastern Departmental Building, where it had been settled what the walls were to be; I afterwards consulted with the architects who said it was right. There is one entrance to the boiler house from the back area, 3 feet 8 inches wide, directly on the landing, from which you get to the bottom of the boiler house by a flight of steps; there is no way to it by the basement, except through the basement rooms. There is another door from the area behind, 3 feet by 9 feet wide, into the west corridor, and through this door and round the corridors, a distance of 160 feet, the fuel will have to be carried to the fuel rooms.

The architects directed safes to be built of Nepean stone instead of fire bricks; there would be a saving in this; I cannot tell how much. The safes are not as in the contract plan as I understand them; they have now iron joisting and a concrete floor at the basement, instead of an arch. I think the arch was safer There is little difference in expense between the iron joists and concrete floor, and the arch. The safe rooms are not lined with Toronto pressed brick inside, but white brick, made, I think, at Brockville. I cannot say whether they are as good as Toronto brick, which I never saw.

The buttresses at the west entrance and at the angle of the south-west corner and east doors are not shown on the basement plan, but they are on the ground plan and elevation. I did not allow them as extra, except under the foundation line, as they were shown on the ground plan and elevation. I thought it was a mistake they were not shown on the basement plan. There is an alteration on the east front, it is a projection of 3 feet by 22; the windows in it are as in the contract plan; the architects ordered this, and the three feet at each end and the cut stone quoins on it are extra; I had a tracing of it given to me by them. In the staircase windows there are extra dressings inside, by order of the architects. The plan showed ordinary windows, as in rooms, but on the 17th May, 1861, I had an order to make the windows double-cased with cut stone through; this made extra work on windows, 8 in number. The octagon tower at the north-west angle is increased in size, 3 feet 9 inches on the north, 9 feet on the south, and 9 feet on the east; it was ordered by the architects upon a Departmental order, as I understood. The area walls are carried to the rock; this was required. The walls are 9 inches below the basement floor line. Three arches in staircases were ordered instead of iron girders. I measured the walls as they are for my returns; what the contract requir-

ed I measured as contract work, and what was extra as extra; extra thicknesses of walls were measured extra.

In the rough rubble work I measured openings, in the brick work I deducted them. I allowed 20 bricks to the cubic foot. I measured the brick, 19 and 20 was the general average to the foot. In making the excavation around the building, we found many boulders, and the excavation had to be made wider than it otherwise would. I allowed 5 feet on the east front, 4 feet on the south, and 3 feet on the west, and behind 4 feet. Beyond the walls I allowed no days' work extra, but around the building the boulders and earth fell in, and I allowed the measurement I have mentioned, as a liberal allowance for the trouble, as the earth had to be carted away. I do not know who ordered the bouchard work in the arches in the division walls, it was the architects or Mr. Morris, and it is the same in the other building. I think they were of no use; fair rubble masonry for the ducts and arches would have been as good I think the brickwork was as good as in the eastern, it is rougher, but as strong; we had not so good a class of men, and the work in the east wing has been more exposed.

The whole building was done in nearly four months. We were stepping some of the foundations, as late as the 24th June, 1861. Part of the cornice on the west front is out a little. I think it was pushed out in putting on the roof.

From the month of June, I superintended the building, and made the estimates, and I made rough plans of the work, as I went along; from these I afterwards made the plans for Mr. Page. The ground floor plan I put in, marked N. I returned the quantity, not the price of the iron joists. There was no delay to speak of, in getting detailed drawings. The other Departmental building was four months in advance of this, and the details of both were alike in many cases. I was sometimes delayed a little in waiting for them from the other Departmental building. I drew all plans which I put in marked.

I was appointed by the Hon. Mr. Rose, but nothing was said about salary then, but I got $60 a month till the Hon. Mr. Cauchon came into office when I got $83 a month. I was told I should have the same pay as others, and my back pay the same as the others, but I have not got it. Mr. Rose told me I should be put on the same footing as the others, when he was here in September, 1860, and it was promised from time to time, but I have not got it yet. Mr. Hutchison got his pay increased, but mine was not, and it remains at $83 a month, the others are $100, except Mr. Larose, who got $116.

I returned no hard-pan, there is none under the Western Departmental Building. I returned clay and rock only. The clay was full of boulders from 6 inches to 4 feet in diameter, and pebbles mixed. It was afterwards returned by the architects as boulder excavation, upon conversation with the contractors. The architects returned the same excavation in the winter, as half rock, it was frozen, and the contractors said it was as bad as rock. There were two windows in the water closets finished outside, with cut stone, like the windows in the stair cases, but with more work. I had no orders, but the detailed plan showed it, and I worked to that.

The balcony over the south entrance door is extra. I had a detailed drawing of that, and also a window over, which was increased from 3 to 4 lights, and other slight alterations, which I had in the detailed drawing of it. There is an extra in the main cornice, it is larger and has more labour on it. I had the detail of this from the architects. I made a sketch of the cornice on the scale from the original drawing. Comparing this with the detailed drawing as I got it from the architects, they do not agree. I should say, the work on the cornice as executed, was 25 per cent over the other. The architects admitted the one detailed was larger, but they said it made no more work. The contractors claimed it as an extra.

I think when the work started, there ought to have been two clerks of works besides Mr. Morris. On the Parliament Building, when the masonry was started, there ought to have been two clerks of works.

Signed, GEORGE BROWN PELHAM.

16th SEPTEMBER, 1862.

MEMBERS PRESENT :

JOHN WILSON, Q. C., CHAIRMAN.

JOSEPH SHEARD, VICTOR BOURGEAU.

TOUSSAINT TRUDEAU, sworn :

I am the Secretary of the Department of Public Works. I was appointed about the middle of December, 1859. I receive all the letters of the Department, and the progress estimates come first into my hands, as well as all the letters addressed direct to the Department. I receive the letters and whatever is enclosed, and submit them to the Commisioner. When the chief Commissioner and deputy are both present, the letters and papers received during the day, are submitted to them. If either is absent they are submitted to which ever of them is present. If an estimate for these buildings were received, the chief commissioner or deputy would direct its reference to Engineer's Office, from that it would come to the commissioner again, and would generally be referred to the Deputy Commissioner before it was paid. The chief Commissioner orders the payment of the estimates when he is in town, when he is not, the deputy orders the payment. Either of them disposes of the business. There is no written order for the payment of an estimate more than an ordinary account. They are treated alike, and no written order given by the commissioner or deputy for their payment. I attend when the business is disposed of, and I am directed to pay what is to be paid, without any written memorandum. I then send the estimate or account to the Accountant, Mr. Baine, who checks the calculations, and prepares a certificate that so much is due the party entitled to it. It then comes back to me, I examine it as to its date, and agreement with the note of it on the margin of the book from which it is cut, to see that they agree. I notice whether it is charged to the right account, and from the right appropriation. When I am satisfied of these things, I put my initials to the certificate. It is then taken to the commissioner by the accountant for his signature, or in his absence, the deputy commissioner. It is then sent to the Minister of Finance, who sees whether there is money appropriated for its payment, and on his certificate that there is money, a warrant is issued for its payment.

17th SEPTEMBER, 1862.

MEMBERS PRESENT :

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

TOUSSAINT TRUDEAU, further examined :

In writing official letters I generally say I am directed by the commissioner to do it, for if the Deputy orders me, I understand him to do it in the name of the Commissioner.

I look at my letter of the 7th February, 1860, (Exhibit No. 45.) I am not prepared to say by whose direction I wrote it, nor am I prepared to say by whose direction I wrote

my letter of the 8th March, (Exhibit No. 46.) I look at my letter as Secretary of the Department, of the 23rd March, 1860, to Messrs. Fuller & Jones, (Exhibit No. 43,) and to Messrs. Stent & Laver, of the same date, marked (Exhibit No. 47.) I look at the copy of a letter of Messrs. Stent & Laver, of the 12th March, 1860, to the Department. I have examined the copy with the original, and I find my own note on the back of the original "act on this." It was acting on the memorandum on the back of this that I wrote the letters of the 23rd March, to Messrs. Fuller & Jones, and Messrs. Stent & Laver.

I find on the back of the letter of Messrs. Stent & Laver, a memorandum made by the Deputy Commissioner to the Commissioner in these words. "This is a good suggestion, and I recommend that it be at once acted on by calling upon each of the architects, and the clerk of works to forward a list of the price upon which the extra work should be returned and paid for in the progress estimates." I cannot recollect that the Commissioner directed me to write the letters of the 23rd March, but this memorandum is of a class always referred to the Commissioner, and I have no doubt, the directions to act, were given to me by him.

(Signed,) T. TRUDEAU.

THOMAS MCGEEEVY, sworn :

I am contractor for the Parliament Building. I was the original tenderer for the whole work. I gave in no schedule of prices with my tender. The Order in Council giving me the contract made it a condition I was to put in a schedule of prices. I put in a schedule, it was made on the printed form, and I have not seen it since. Mr. Keefer said the prices in it would overrun the contract before the work was finished ; they were too high. He said the architects were preparing one which should apply to the contract work only. I said I should not sign one which should apply to extra work, unless it were one to my own satisfaction. I made objections to some of the clauses in the contract, and it took some days to settle the contract. I got a note from Mr. Keefer to say the contract was ready, and I went over to sign it. I had read the contract before, but I did not read it then. I did not read the schedule, or know that the heading of it applied to extra or additional work when I signed the contract. I signed it the evening I went over. When the contract was being drawn I understood the schedule was not to apply to extra or additional work. I never had any private conversation with Mr. Rose or any member of the Government about it. I think Mr. Rose knew it was not to apply, but I cannot swear to it.

As soon as the contract and specifications were printed, I saw that the heading applied to extra and additional work, and I went to Mr. Keefer immediately about it, and spoke to him. He said I need not mind. It was a mistake in not leaving out the heading, it would be all right, or to this effect. I think, but am not certain, either Mr. Jones, or Mr. Haycock, was with me at the time. It was between Mr. Keefer and me that the agreement was made that the schedule of prices should not be applied to extra or additional work, before the contract was signed. Nothing was said about the schedule when the contract was signed. If I had noticed the heading of the schedule I would not have signed it. Nothing was said about it till I saw it printed, as I have stated.

(Signed,) THOS. MCGREEVY.

JOHN HENRY PATTISON sworn :

I am an Architect and Building Surveyor by profession. I have followed it 22 years; 14 in England and nearly 8 years here. I was appointed on the 1st day of June, 1861. I put in a copy of the letter appointing me and detailing my duties. (Exhibit No. 64.) I immediately entered upon my duties, and commenced measuring the work done in May, 1861. I measured from that time to the present on these Departmental Buildings. I had nothing to do with the Parliament Building. I measured the work monthly, made out the quantities, and handed them to the Architects. I measured for May, June, July,

and August. I had commenced with the September estimate, and I had also checked all the measurements of the excavation in the sewers, ducts and main buildings, the rubble masonry in all these, and sundry minor measurements. I had made tracings of all the plans of the two buildings. I had entered all the previous estimates in books for that purpose, and opened abstract books for my own measurements at the time Mr. Killaly came. Up to this time I had adopted the mode of measurement which had been pursued before my appointment, which was to measure excavation by the cubic yard. Rubble masonry by the toise of 54 feet, including openings, and all walls under 2 feet as 2 feet. I had not been accustomed to measure openings in walls, or walls thicker than they were, to contractors, and I mentioned this to Mr. Keefer and Mr. Rubidge, both of whom directed me to measure them as had been done and I did it. I measured cut stone cubed for material, and all kinds of chiseled work on the visible face.

Brickwork, deducting all openings, excepting flues and allowing 20 bricks to the cubic foot. I had measured the bricks in the work and found about 18½ bricks in the foot, but Mr. Rubidge, to whom I mentioned this, directed me to allow 20 to the foot as had been done before.

Nepean stone facing I measured over the whole face, deducting for window and door openings, from the external part of the worked sill to the spring of the arch for the height, and from angle to angle of the outside chamfer for the width. On this matter I had some doubts, but on referring it to Mr. Rubidge he did not say he directed the system but advised me to follow what had been done. My own view was to measure the actual facing of the Nepean stone. I had not heard till I came here of the 72 feet toise of French feet of Lower Canada.

On the 30th September, 1861, Mr. Killaly, gave me written instructions to measure the building, and the mode of measurement which I now show, and put in a copy of it which I pray may be read. (Exhibit No. 65.) He consulted me on one item, the mode of measuring cut stone in England. I told him in measuring labour upon it I should measure according to the English system; for plain work, one bed and one end, and on the face, in all cases where the stone had to be reduced to a plain face in order to apply the necessary moulds for cutting to the required shapes. I told him I had little experience in measuring cut stone work in this country. I had made some objections to measuring beds and joints in the ashlar work of the drains and ducts, and the boiler house, and some objection to measuring the centreing over the whole surface. I had been told verbally to measure the ducts and drains solid, but I did not conceive my instructions warranted me in doing so, and I did not until I received written instructions from the architects, being the letter of Mr. Killaly to them, dated 23rd October, 1861, a copy of which I put in (Exhibit No. 66); after this I added the centreing. I made solid the drain and ducts from which before I had deducted the opening, and I added beds and joints in the limestone ashlar. I then made an approximate estimate of the quantities thus measured, and on the 22nd October I took it to Mr. Killaly who approved of the form, and with a letter directed me to carry it to the architects to be priced out, which I did I did not see it again till the following January. He did not consult me as to prices on my mode or on any other mode of measurement. I did not enter this estimate in the books, for I never saw it after I delivered it to the Architects till the 22nd January, 1862, and again on the 31st March, 1862, when it was handed to me by Mr. Clarke, one of the Contractors, for my signature, with a letter from Mr. Killally, which I now show and put in a copy, (Exhibit 67,) it is dated the 26th March, but I received it on the 31st. I signed the estimates, but before doing so I consulted Mr. Stent as to whether I had better sign them or not. He considered I had better and I did sign them I sent them with a letter, a copy of which I put in, (Exhibit No. 68.) If I had been asked to sign it, approving of prices, I should have refused, but as I was asked to sign it to certify measurements, I did it.

I never saw any of the prices allowed by Mr. Killaly, till I had completed my final measurements, about the 22nd day of January 1862. I had not the order of the items of my approximate measurement of October, and I got it from Mr. Stent, to make my final one in the same order, then I saw the prices fixed upon for the work. His price of 40 cents a foot upon the ashlar would make it about 60 cents face measure, and his mode of

measurement and prices would add about 50 per cent to the former prices. In rubble masonry, Mr. Killaly's mode of measurement is by the cubic yard, for which he allowed $6,50 per yard. $13 per toise of 54 feet or $20.20 for the French toise of 86 feet. I had no instructions as to charging for the stone, or allowing for it. I measured the masonry as I found it built.

In applying my instructions from Mr. Killaly, I found cases of this kind. A brick wall by the contract was to be 1½ brick, but was built 3 bricks thick. I asked him if I was to measure the ½ extra and leave the other half as the contract work. He said no. All was to be measured, and priced extra, and then the price of the contract work deducted. I look at the blue book, page 415, item 63 of the western Departmental building, and I see 1,674,110 bricks, of which 753,060 are contract, the difference is 921,050 at $13.80, amounts to $12,769.80, but by Mr. Killaly's mode of estimating the whole as extra at $13.80, and the contract at $6.30, the amount is $18,358.44, the difference $5,588.64. I look at blue book, page 409, item 62 of the eastern block, and I see 2,002,571 bricks, of which 957,360 are contract, the difference in quantity is 1,045,211 at $13.80, amounting to $14,433.91, but by Mr. Killaly's mode of estimating the whole as extra at $13.80, and the contract at $6.30, the amount is $21,604.11, the difference $7,180.20. In all the walls for both buildings, the footings are specified to be two courses, each six inches with a four inch projection. This a cubic foot to every foot in length, as executed. The bottom course is one foot three inches in height, and one foot six inches wider than the wall. The second course is 1 foot high and 9 inches wider than the thickness of the wall. The cubic contents 2 feet 7½ inches. The difference 1 foot 7½ inches cube on every wall over all the buildings.

I did not return the item 91 of the eastern block of $5,000 for scaffolding, nor the item 92½ of the same block of $2,632 for temporary roofing. Neither the item 86 of the western block of $3,500 for scaffolding, nor the item 87½ of the same block of $5,264 for temporary roofing. I put in a copy of my instruction from the Department, when Mr. Killaly came, (Exhibit No. 69.) According to the mode of measurement adopted by Mr. Killaly, and carried out by me, all the excavations for ducts where they were not cut stone, were measured as if filled with solid rubble masonry, to the height the masonry was carried up. All the ashlar work was measured as rubble work, and then the cut stone at its bed, joint and face, but where the openings were ashlar face, they were deducted.

I did sign in March the estimates which Mr. Killaly made, as measurer of works, under the circumstances I stated, but only as certifying to the correctness of the measurements. I had nothing to do with the modes of measurement, or prices allowed for extra work.

Where I found a wall out of place and thickened, but a wall which was shown on the contract plan, Mr. Killaly directed me to measure it as extra, and also as contract, with a view to its being deducted. In this way, all brick which in any way varied in thickness or height from the contract, was rated by him as extra, at the extra price of $13.80, and then the contract work contained in them was carried out at the contract rate of $6.50, instead of first deducting the contract from the whole quantities, and carrying out the difference as extra work, at extra rates.

On the two Departmental Buildings, it makes a difference of $12,768.84 in favour of the contractors. In looking over the evidence given by Mr. Killaly, before the commission appointed by the Legislative Council, I see that Mr. Killaly admits having ordered the system of measurement in answer to question 30, page 7, of minutes of this evidence. In measuring brick walls, no deductions were made for flues, the smoke flues were generally 9 by 14, the air flues about 6 by 12, a few were 6 by 18 inches The walls were measured as solid, openings such as doors were deducted. I asked Mr. Stent yesterday, for my bills of quantities, upon which Mr. Killaly made his estimate, and I was told he had them not. I now put in copies of my draft to show my quantities as given to Mr. Killaly. The draft substantially agrees with the bills I gave. They are exhibits 94 and 95, I pray they may be read. I put in also my estimate of quantities of contract brick-work, which ought to have been deducted from the extra work, before the prices were carried out. They are the same as are mentioned in items 62 and 63, of Mr. Killaly's estimate This is exhibit 96.

I look at in Mr. Killaly's estimate items, 6, 7, 8, 10, 11 (blue book, page 406); and items 76, 77, 78, 79, 80, 80½, 81, 82, 83, 84, 84½, (pages 409 and 10); 7, 8, 9, 10, 11, (blue book, page 412); and at items, 71, 72, 73, 74, 75, 75½, 76, 78, 79, 79½, (blue book, page 415.) In constructing the building, certain alterations, and substitutions, took place in cut stone work. The stone work in these was all measured extra, and carried out at extra prices by Mr. Killaly, and the quantities of work so dispensed with, and being those which the contract required, were carried out at contract prices, and then deducted instead of deducting the contract quantities from the extra, and the carrying out the extra work at extra rates.

This made a difference in favor of contractors, of $28,720.71 on the two Departmental Buildings. I put in a table of the quantities replaced by work of a different kind, carried out in detail, and exhibiting the result spoken of. (Exhibit 97.) The earth excavation in the west Departmental Building, consisted of clay with boulders. The architects and Mr. Killaly, on account of the difficulty in excavating it, agreed that it should be returned as half hard-pan, and half clay, and this was done at their suggestion. Mr. Pelham had returned it as clay with boulders. I had no special directions at the eastern Departmental Building, and took Mr. Hutchison's return for it as he made it. I put in a copy of the letter carried by me to the architects, from Mr. Killaly, accompanying my approximate measurements. (Exhibit No. 98.)

18th SEPTEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

JOHN HENRY PATTISON, further examined:

I look at item 57, page 409, of the blue book, being the estimate for the eastern block, and I find the quantity of cut ashler, in the boiler house, sewers, and ducts to be 28,572 feet, at the rate of 40 cents per foot, amounting to $11,428.80. On looking at items 79 and 80, in Mr. Page's estimate, I find the face work for the boiler house, is returned as 720 feet, at 90 cents, amount to $648; and 3,988 feet, at 87 cents, amount to $3,110.64.

The Honorable JOSEPH CAUCHON, sworn:

I say I became Commissioner of Public Works about the 13th June, 1861, and continued till about the 23rd May, 1862. I look at the certificate for $40,000, as No. 7917, dated 11th September, 1861, in favour of Thomas McGreevy. I explain that when works have been ordered, and money appropriated, there is no authority required for the Commissioner to issue a certificate. He may do it of his own authority. I also explain that when I found how things had been carried on in regard to these works, I would not pay anything on estimates. I took care that from what the estimate showed, I was not overpaying for the work.

Progress estimates are intended to show the work done, with a view to advances; but are not conclusive on the government, only to show that the bulk sum is not being overpaid, while the work progresses. I only made advances on account to be settled afterwards

between the contractors and the government. This order was issued by me on account, out of the Parliamentary appropriation. A copy is put in marked, Exhibit No. 70.

I now look at certificate No. 7,999, dated 8th October, 1861, for $40,000 in favour of Thomas McGreevy. It is signed by me, and ordered to be paid by me, of my own authority out of money appropriated by Order in Council of the 23rd September. A copy of this order is put in (Exhibit 71), the copy of certificate is Exhibit 72. I now look at certificate No. 8,[illegible], [illegible] 8th October, 1861, for $10,000 in favour of Thomas McGreevy; it is signed by me, and ordered to be paid by me, of my own authority out of money appropriated by the same order in Council, of the 23rd September. A copy of this certificate is put in, (Exhibit 73).

I now look at certificate No. 8,192, dated 20th November, 1861, for $45,000 in favour of Thomas McGreevy; it is signed by me and ordered to be paid by me of my own authority, out of money appropriated by another order in Council of the 19th November, 1861. A copy of the order in Council is put in, Exhibit 74. A copy of the certificate is put in (Exhibit 75). I look at certificate No. 7,749, dated 1st August, 1861, for $10,000 in favour of Messrs. Jones, Haycock & Co., it is signed by me, and ordered to be paid by me, of my own authority, out of money appropriated by Parliament. A copy is put in, (Exhibit 76). I look at certificate No. 7854, dated 24th August, 1861, for $40,000 in favour of Messrs. Jones, Haycock & Co., it is signed by me, and ordered to be paid of my own authority, out of money appropriated by Parliament. A copy is put in (Exhibit 77). I look at certificate No. 7921, dated 11th September, 1861, for $23,700 in favour of Messrs. Jones, Haycock & Co., it is signed by me, and ordered to be paid of my own authority, out of money appropriated by Parliament. A copy is put in (Exhibit 78).

I look at certificate No. 8000, dated 9th October, 1861, for $30,000 in favour of Messrs. Jones, Haycock & Co., it is signed by me, and ordered to be paid of my own authority, out of money appropriated by an order in Council of the 23rd September, 1861, (Exhibit 79).

I look at certificate 8091, dated the 28th October, 1861, for $10,000 in favor of Jones, Haycock & Co., it is signed by me, and ordered to be paid of my own authority, out of money appropriated by order in Council of the 23rd September, 1861. It is put in, (Exhibit No. 80). I look at certificate No. 8191, dated 20th November, 1861, for $45,000 in favour of Jones, Haycock & Co., it is signed by me, and ordered to be paid of my own authority, out of money appropriated by order in Council of the 19th November, 1861, a copy is put in, (Exhibit 81).

I look at certificate No. 8831, dated 13th May, 1862, for $2,000 in favour of Jones, Haycock & Co., it is signed by me, and ordered to be paid of my own authority out of money appropriated by order in Council of the 19th November, 1861. A copy is put in, (Exhibit 82). On my report of the 21st September, 1861, the order in Council of the 23rd September was made; and on my report of the 18th November, 1861, the order in Council of the 19th November was made. Copies of them are put in (Exhibits 83, 84). On the 3rd August, 1861, I adopted a report to Council, which I pray may be read; a copy of it, Exhibit 85, is put in, no order in Council was made upon it. I paid no specific sum on the recommendation of the Hon. Mr. Killaly, or on the estimates. There was no regular estimate after the month of August, 1861, but I made some of the advances above mentioned, on information received by the Department, from Mr. Killaly, in his second letter of the 30th September, enclosing those of the architects of the respective buildings, and the measurer of the Parliamentary buildings. They are put in, Exhibits Nos. 86, 87, 88, 89, 90, 91, 92 and 93, which I pray may be read. I made advances which I conceived were within the amount of work done, as shown by the estimates or other documents. I ordered the work to be stopped with the concurrence of the government, because the appropriation had been expended, but the government, by the order in Council of the 23rd September and 19th November, enabled me to make advances to the contractors to pay off their men. When I came into the Department, I did not consult Mr. Keefer, the Deputy Commissioner, for I had no confidence in him. A few days before the Desjardins Canal accident, he had reported that briged safe; he had certified the Grand Trunk Ferry Boat at Montreal safe, a day or two before the explosion at Longueuil.

On an inquiry as to an accident on the Great Western Railway, the jury reflected upon him. In my opinion he had by his management in regard to the heating and ventilating of these buildings, and other mismanagement, driven Mr. Rose my predecessor from office. I had therefore no confidence in him, and never consulted him about these works. I was obliged to look for information from other officers in the Department. In looking at the tender of Mr. Garth, I find his offer did not include excavation, masons', bricklayers' and joiners' work. Before he advised the accepting of that tender, it was Mr. Keefer's duty to have had an estimate of the expense of all these made, and laid it before the commission, and if he had, it never in my opinion would have been undertaken, for it caused all the embarrassment about finishing the buildings, by absorbing the money appropriated for them. The Department is not well organized; for example, Mr. Keefer is an Engineer and has been accustomed to make canals. The assistant Engineer is a good draughtsman, but neither is competent to advise about the construction of buildings like these. The notices for designs and for the tenders for these buildings were not definite enough. They should have been so explicit, as to have admitted of no misunderstanding. The original advertisement for designs stated that, "the above edifices are proposed to be built in a plain substantial style of architecture, of coursed hammer dressed "masonry with neatly pointed joints, and cut-stone quoins, window dressings and cornices, "entablatures, the material being found in the vicinity of the city of Ottawa."

Interior walls to be of Brickwork, not such buildings as these. The plans of these were selected because they looked very well, but are not adapted to the objects for which they were intended, and have not light enough. Before the contract was let for the buildings, it was the duty of the Deputy Commissioner to see that it comprised the whole building, foundation, heating and ventilating complete, so as to avoid as far as possible extra work. In my opinion all that was required, was to provide heating and ventilating for the two legislative chambers. These are sometimes filled to excess, and it is essential to have the means of heating and ventilating them, but in ordinary rooms, where two or three are employed, an ordinary chimney flue, is all that is necessary.

(Signed,) JOSEPH CAUCHON.

JOHN BOWES, Sworn:

I am an architect and builder. I practised as an architect eleven or twelve years. I had been in the employment of the Department over two years, some time before my appointment to these buildings, and I was appointed on the 20th May 1861 as measurer to the buildings. I came to Ottawa before I received my instructions. I was first employed in checking over the measurements of the Western Departmental building, till I received my instructions, about the 31st May 1861. My appointment is published in blue book, page 349. I proceeded on the 2nd or 3rd of June to make measurements for the progress estimate for May, and returned the quantities to the architects. They set the prices and returned them to me and I made the two copies for the Department. I continued from month to month to measure till Mr. Killaly came. By the time he came I had measured all the foundations of the Parliament building, having sunk test pits to ascertain their depths, and I was proceeding to make a progress estimate for the month of September, at the time he came.

I received instructions from the Department about the 23rd September, to afford him every possible assistance and information he might require. I put in a copy of the letter of the Department instructing me, dated 21st September 1861. (Exhibit No. 99.) On the 30th September 1861, I received written instructions from Mr. Killaly. I put in a copy. (Exhibit No. 100.) I put in a copy of a letter from Mr. Killaly to me, dated 24th October 1861. (Exhibit 101.) Also the schedule of prices signed by Mr. Killaly, referred to in that letter. (Exhibit 102.) Upon these instructions I proceeded to measure the work, and when I had done it I made up the estimate according to the prices mentioned in that list

When I came, I measured on the system which had been in use. About the 16th August 1861, I received a letter from the Department, dated 14th August 1861, a copy of which I put in, and pray to be read. Exhibit 103. When I came here I found the openings were deducted in rubble masonry. The system in Ottawa was not to deduct openings under ten feet wide. This was the only difference I recollect between them. 72 feet is a toise in Ottawa. By the contract the toise was 54 feet. In Toronto only, I have known 54 feet to the toise, but then the openings are deducted, and the standard wall is 18 inches. In Ottawa it is two feet. Where stone is scarce, they deduct openings, where it is not they include them. The Nepean stone before the month of August, was measured to the chamfer of the jambs. After my instructions of the 14th August, I measured the openings as faced with Nepean stone, but for the month of July and August only. According to my calculation, the difference between Nepean facing and Ottawa limestone, would be ten cents a foot super, of the wall measured to the cut stone.

I had not heard or known, beds and joints to be measured in this country, before Mr. Killaly instructed me. I had heard of it in England, where beds are given for the setting of certain descriptions of work. In measuring the stone for the ducts and drains and boiler house, by Mr. Killaly's mode, one foot on face measure would be about two feet six inches. The difference in the amount in money would be about $45,000, in these ducts, drains, and boiler house in the Parliament building. In the Ohio stone in the building it wouldamount to about $10,000.

In measuring the work under Mr. Killaly's instructions, where changes and additions had been made, either in position, style of work, or class of material. "That is to say, such work and materials provided for work, coming under the head of the contract work, but in which changes or additions had been made, either in the position, style of work, or class of material, from that shown and specified. Or all work, labour and materials not included in original plans and specifications." I measured the extra work only. I did not measure the whole as extra, as was done on the Departmental buildings. If I had done so, and if the price had been carried out as was done in them, the difference in amount on the Parliament building would have been at least $100,000 more. I declined so to measure it.

In carrying out Mr. Killaly's written instructions I did as follows: I measured the flues as solid wall, and then their length. I measured all the work as I found it right or wrong. I did observe useless and superfluous walls, but I measured them all, and returned them in my quantities. All the ducts and drains were measured as solid masonry. When I began Mr. McGreevy contended that all the masonry in the drains and ducts outside the building, should be measured solid, according to Mr. Killaly's written instructions. I contended the openings should be deducted. Although I was liberal as I could be, he was never satisfied with the dimensions of the walls in the drain and ducts. Subsequently I made sections of the excavations; and on them I made my measurements of solid work. All the face beds, and joints of the cut stone I measured by the superficial foot. I measured a plain face on the Ohio cut stone, and then the moulded or sunken work in addition. I measured a bed or joint of whatever the stone would measure.

I measured the quoins on the building. The contractor claimed extra work upon them, and I measured them for this purpose. Some were up to the specification, others not so good; on the whole no better than the specification, but Mr. Killaly allowed 15 cents a foot, extra work on them, in his item 81, (blue book, page 368,) about $1781.40. In measuring extra rubble masonry, I measured by the cubic yard not by the toise. All above the width and thickness shown on the contract plans, and all the walls which I found, not required by the contract, I measured as extra, whether they were necessary or not. In measuring the rock excavation in the building, I found a plan in the office not figured, but showing where the rock was. I showed it to Mr. Robert McGreevy, who said it did not show enough. He required dimensions beyond that, and forming the best judgment I could, I gave dimensions which satisfied him. I could find no cross sections, and no one to tell me exactly the depth or area.

I spoke to Mr. Morris, and he showed me as near as he could from memory, on the front of the building. The depth of earth and rock, I ascertained by sinking pits. I

wished Mr. Killaly to allow Mr. Grist, who had been here from nearly the beginning, to assist me, but he would not. He said Mr. Larose would assist, but he knew no more than myself. My measurements of the rock and earth excavations were made on the date I have mentioned. There was nothing in the office to show me otherwise, except Mr. Grist's sections of the excavations of the ducts and drains, which Mr. Robt. McGreevy said were not correct. Mr. Killaly directed me to take Mr. Grist and his sections to meet Mr. McGreevy, who said he had memoranda to show Grist's sections were wrong. I had arranged to meet them at a certain time, but Mr. Killaly said he had reconsidered the matter of Grist going with me, and he could not see the propriety of it, as the architects had notice that he was to be discontinued. I saw Mr. Robert McGreevy alone, and his memoranda, which he had in his memorandum book, and comparing them with Mr. Grist's, I found them larger. Mr. Robert McGreevy said he would have his dimensions, or have them all ripped up and tested. I tried to satisfy him as near as I could, and he was satisfied with my dimensions which were a compromise between Grist's and his own.

Mr. McGreevy had but a memoranda of one part to show. On an examination of the measurement now going on, I find Mr. Robert McGreevy's dimensions are more correct than Mr. Grist's. I gave Mr. R. McGreevy fully more than the dimensions actually were. I could see no reason for excavating the rock under the building, but the architects said when they excavated the rock for the ducts and drains, it shook it so, that they thought it best to take the whole out. I have seen the book of Mr. Grist, said to be a copy of the book which was lost, up to July, 1860. The rock excavations then are less than I allowed by about 1700 yards, but I never saw that book to examine it, till I saw it here when it was put in. After I had made up my quantities and prices according to the list Mr. Killaly gave me, I made up an estimate and sent it to him at Quebec, on the 3rd November, 1861. It had the same quantities as his estimate I now see in the Blue Book, page 368, and following, but differently arranged. The prices are the same, and agree with the list, which he gave me. I had kept all the work for heating and ventilating separate, as we had previously done, and as I made the estimate, it showed the contract work, work connected with heating and ventilating, and extra and additional work which was all the work extra to the contract, and extra to heating and ventilating. The word additional work was not used in the estimates till Mr. Killaly directed it; it was called extra work. There is no additional work in my opinion on the Parliament building, it is the design carried out, with slight changes, which are extra work, but there is no addition to the design except the ducts and main drains.

Mr. Fuller made out the estimate as it is now found in the Blue Book, from my estimate, under Mr. Killaly's instructions at Quebec. Mr. Fuller and I were sent for to Quebec, and we went there on the 5th November, 1861. The estimate for the Departmental buildings had then been made out, and Mr. Killaly said he thought it the best form, and directed the one for the Parliament building to be made in the same way, and it was done. The columns in mine showed, first contract work; second heating and ventilating; third extra and additional work. I understood that if the estimate was made up in my way, it would show a large amount of extra work, more palpably, than if made up in the way in which it is, and it would look better in this way, but when it is analysed it is the same in fact. I had previously signed the progress estimates from the time I came. I had made the measurements according to Mr. Killaly's written instructions as correctly as I could. I had applied his prices to these quantities, and signed his estimate as measurer, certifying to the correctness of the measurement, and the rating of the works at his prices. I had nothing to do with the adoption of his mode of measurement or fixing his prices. I had nothing to do with either. I had no knowledge of any payments being made to Mr. McGreevy except on the progress estimates on the 30th September, 1861, in view of the stoppage of the work. I was asked by the architects to recommend an advance of $60,000 to Mr. McGreevy, and knowing there was work not then returned which had been done, I recommended it, and wrote my letter to Mr. Killaly of the 30th September. I assisted in making out the estimate for the finishing of the Parliament building, last winter. I think the contract work is not quite half done, it will cost more to finish it, than has been paid on the contract proper. If iron roofs are put on the Legislative halls, and library, the work yet to be done on the ducts and drains finished, and other things contemplated done,

there will be as much extra work to do as has yet been done. In the estimate for finishing, the quantities seemed so large, that I was afraid the whole thing would come to an end, and I advised Mr. Fuller to reduce the quantities, and I do not vouch for their correctness. I think it will require $214,000.00 to finish the building without the extras contemplated and $464,000.00 with them, at fair prices.

Last winter I prepared a list of prices for work on these buildings, which will allow a profit to the contractor of 20 per cent; I put it in. It is at fair current rate prices for work and material here, and the profit of 20 per cent. I will not say it will pay the present contractors, but it is a fair value for the work. It is Exhibit No. 104. The contractors here seem to manage the work at great expense. They have a large and expensive staff. In measuring the Nepean facing over all the openings I got verbal instructions from the Hon. Mr. Cauchon, to measure for July and August in that way. My former estimates excluded the openings. Now that I know it was a substitution of Nepean stone for Ottawa stone, I should measure the actual face, and allow for the actual difference in cost, as the correct mode.

(Signed,) JOHN BOWES.

THOMAS MURRAY, sworn :

I am a mason and stone-cutter, I have followed the business 16 years. I have been in Ottawa more than 2 years. I worked on the Parliament Building in cutting and setting stone. I worked by the day and by the piece. I worked about 18 months on the building.

From 8 to 10 feet of plain ashlar, measured on the face only, of Ohio stone, is a days' work of a journeyman stone-cutter; with this he prepares the bed and joints, which are not measured to the workman. The face only is measured, for straight moulded work, such as is in the jambs of the windows and doors of the building. Stone-cutters were paid 25 to 30 cents a superficial foot, girthing all the chiselled face of what is seen. For the cut-stone in the arch of each window above the carved string cause, masons got $21 including the label mouldings. For the sills of the windows of the upper story, masons got $7 for each sill of each window. For the moulded work on the jambs of the entrance tower, 25 cents per superficial foot of the girth. None of the tower work was done by the piece to my knowledge except the sills. The circular work over jambs 45 cents a foot. The work in the main cornice girthing, it is worth 35 cents a superficial foot, only the seen work is girthed or measured. The work in the jambs of the main tower in the second story, is worth 25 cents a foot superficial, the arched work 35 cents. The sills are worth $7 a piece. Masons were paid $1.25 to $1.75 a day.

The prices I have mentioned for piece-work, were paid in winter, and the men did not make great wages. In summer it would be worth 10 per cent more. Most of the cut-stone was done in summer. There were two summers and only one winter. When the work was done by the day, which I have stated was done by the piece, it would cost the contractor 15 to 20 per cent more. Last summer the men would not work by the piece, at the rates I have mentioned. They wanted $27 for the windows for which they had been paid $21. For the sills which were only paid at $7, they wanted $9. The carved string course from which the arches spring, the masons worked at 50 cents a running foot, without the carving, which was done by carvers.

Masons, one with another, on foundations such as these, would build a toise of 54 feet each per day. The work could be done on any part of the building for the prices I have stated. It is the actual cost of the work of which I speak. One setter had $2 a day, the rest had about the same as masons, but Mr. McGreevy had apprentices who got 50 cents a day. I have seen four in the shop. In railways in this country I have seen beds and joints allowed, but in stone yards in this country and in the States, what is seen on the face only is measured.

(Signed,) THOMAS MURRAY.

the estimate for finish-
ing would come to an
ot vouch for their cor-
ng without the extras

lings, which will allow
current rate prices for
say it will pay the pre-
it No. 104. The con-
have a large and expen-
I got verbal instructions
that way. My former
itution of Nepean stone
e actual difference in

JOHN BOWES.

16 years. I have been
uilding in cutting and
bout 18 months on the

of Ohio stone, is a days'
nd joints, which are not
ght moulded work, such
-cutters were paid 25 to
is seen. For the cut-
as got $21 including the
masons got $7 for each
entrance tower, 25 cents
ne by the piece to my
ts a foot. The work in
only the seen work is
in the second story, is
siills are worth $7 a

nter, and the men did
nt more. Most of the
ly one winter. When
he piece, it would cost
would not work by the
indows for which they
they wanted $9. The
worked at 50 cents a

ld build a toise of 54
ilding for the prices I
One setter had $2 a day,
pprentices who got 50
untry I have seen beds
tates, what is seen on

THOMAS MURRAY.

JOHN ROWAT, sworn :

I am a Mason and Stone Cutter by trade, I have been engaged in building in Ottawa for about 16 years. I have built a good many houses through the city. I know the value of work, and the mode of measurement of it. Ottawa clay excavation, not exceeding six feet deep, is worth 15 to 20 cents per cubic yard, hauled to a spoil bank near. Rock excavation to 8 feet $1.00 per yard, for the next 5 feet $1.25, next 5 feet $1.50, and about the same below that. At these rates the excavator does not get the rock. A toise of limestone of 216 feet is worth at the quarry $2.00, and about $2.00 to haul it. I should consider such stone as was worth using in the rubble work, worth $2.00 a toise from the excavations. The toise of rubble masonry is 72 cubic feet, openings measured under 10 feet. All walls are counted at 2 feet, although less by this mode, whatever is over is cubed, and reduced to the standard of 72 feet.

Cut Stone is measured on the face, all that is seen on the building is measured. Beds joints are not measured, but window jambs are measured, check and all. Rubble stone is worth in the walls $5.00 to $5.50 per toise of 72 feet. This would be $3.75 to $4.12½ per toise of 54 feet. Pick-faced masonry of 1 foot bed, such as I see, is worth 10 cents to dress, and the material 17 cents ; 27 cents in all, face measure. The two feet bed stones are worth 37 cents, and the work 19 cents ; 56 cents in all per foot, face measure.

(Signed,) JOHN ROWAT.

JOHN PAGE, Sworn :

I am Chief Engineer in the Department of Public Works. I was not consulted in reference to the designs of the public buildings at Ottawa, or as to their being contracted for, or managed. I had nothing to do with them in the winter of 1860 and 1861. I got to Ottawa two or three days before Christmas 1860, and left on the 1st or 2nd March 1861.

I am now here in charge of the original plans and papers of the Department in reference to them for the use of the Commissioners. I came on the 11th July 1862, and have remained since. The copies which I have furnished and certified to the Commissioners of original deeds, letters, papers and plans, in the department of Public Works, are true copies of the originals respectively, and of the endorsements thereon, and correct tracings of the contract plans relating to these buildings.

(Signed,) JOHN PAGE.

20th SEPTEMBER, 1862.

MEMBERS PRESENT :

JOHN WILSON, Q. C., CHAIRMAN,

JOSEPH SHEARD, VICTOR BOURGEAU.

JOHN HENRY PATTISON, further examined :

The quantities of the face work on the sides of the drains and ducts by my own measurement, is 10,917 feet. If the price of 37 cents for this work, allowed at items 72 and 73, of Mr. Page's estimate is applied, the amount will be $4,039.29. The quantity of arched work in the boiler house, soffit measure, is 297 feet, at the rate of $1.75 allowed for the arched work in the sewers, would amount to $519.75. I look at item 58, blue book, the quantity of cut arches through walls, and in air ducts is 8,018 feet, the price 35 cents, but as the extension amounting to $10,824.30, would require a rate of $1.35 per foot to produce it, I presume this to be an error in printing the figure 1 for dollar, before the 35 being left out, and that the rate is really $1.35 per foot. The measure of these arches is 1975 feet, the price by items 7 and 76, in Mr. Page's estimate, $1.35, if applied, gives $2,666.25. At item 59, blue book, the quantity of cut arches and inverts in sewers, is 14,709 feet, at $1.75 per foot, amount, $25,740.75. The face measure of these is 3,157 feet.

The price I find at items 120, 121 of the Architects estimate $1.75, which rate applied to this quantity would amount to $5,524.75. The whole amount allowed for these items, 57, 58, 59, is in Mr. Killaly's estimate $47,993.85. The quantities and rates of face work, as above given, is $16,498.68, the difference being $31,495.17 for the eastern block. I look at item 58, page 413, Blue Book, being the estimate for the western block, and I find the quantity of cut ashlar in the boiler house, sewers, air ducts, &c , 26,877 feet at 40 cents, amount to $10,750. In Mr. Page's estimate, items 65 and 66, the face work in the boiler house is 800 feet at 90 cents, amounts to $720, and 3,131 feet at 78 cents, amount $2,442.18. The face work to the sides of the sewers and ducts, I find to be 7,671 feet, which at the former rate of 37 cents, amounts to $2,838.27. The soffit measure of the arched work of the boiler house is 220 feet at $1.75 as above, amounts to $385.

At item 59, Blue Book, page 415, the cut arches through walls, and in air ducts, is charged as 6,202 feet at $1.35, amount $8,372.70. Their soffit measure is 1,950 feet, the previous rate of $1.35, if applied, produces $2,632.50. At item 60 of Blue Book, page 415, the cut arches and inverts of sewers is charged as 12,131 feet at $1.75, amount $21,229.25. The visible face measure of these is 2,867 feet, the rate $1.75. Item 54 of Mr. Page's estimate, if applied, yields an amount of $5,017.25. The total amount of these three items, 58, 59, 60, in Mr. Killaly's estimate is $40,352.75.

The several amounts of these works, or the quantities now given, and the rates named, give a total of $14,035.20, the difference being $26,317.55, and if the difference of $31,495.17 in the eastern block is added, their joint sum will be $57,812.72 in favour of the contractors by Mr Killaly's mode of measurement, and increased prices on the cut stone, ashlar in drains, ducts, and boiler houses of the Departmental buildings. In measuring the brickwork, I made no deduction for flues, but I returned the lineal measurement of all flues in accordance with my instructions.

(Signed,) J. H. PATTISON.

18th DECEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., CHAIRMAN.

JOSEPH SHEARD, VICTOR BOURGEAU.

Commission met for despatch of business, but adjourned in consequence of the non-arrival of witnesses.

19th DECEMBER, 1862.

MEMBERS PRESENT:

JOHN WILSON, Q. C., Chairman.

JOSEPH SHEARD, VICTOR BOURGEAU.

SAMUEL KEEFER, Esq., at his own request is further heard on oath in explanation of what Mr. McGreevy said in his evidence respecting the alleged agreement to dispense with the schedule of prices attached to the contract: he says, I am surprised to learn that Mr. McGreevy considers he made any agreement with me, in reference to the application of the schedule of prices to be attached to the contract, I must only repeat that what I stated before in my evidence on this point is true. No such agreement was made with me, and none could be made with me, because I was not the official organ of the Department, with whom alone such agreement could be made. Had the commissioner been absent, and it had fallen to my part to execute the contract, it might then with truth be said that I was a party to the agreement, but the Commissioner being present for that purpose the Act of agreement is not mine, but his. In his absence I act for him as his deputy, and in such cases, am responsible to him for what I do. Here I wish to point out the distinction between the functions of an assistant, and a deputy Commissioner under the public works Act of 1846, and from that time down to the Act of 1859, under which I was appointed, the assistant Commissioner, possessed co-ordinate powers with the chief Commissioner, and could and did, by his acts bind the Government to his engagements, but this not being in accordance with the principle on which the Government was conducted, (the assistant not having a seat at Council,) the law was changed in 1859, and the second Commissioner made the Deputy of the first, and instead of having co-ordinate powers, was made the subordinate of the Commissioner, and placed in the position of a deputy head of a Department, as provided by this Act, and the civil service act taken together. He is supposed to carry out the orders of the Commissioner, and conducted the business *without prejudice to the control of the latter in any matter whatever.*

I say then, that neither in awarding the contract to Mr. McGreevy nor in fixing its terms and conditions, was I the responsible party; nor was it right that such important matters should be intrusted solely to a subordinate in my station. What I did on this occasion, and what were my views respecting this affair, can plainly be discerned by reference to the official documents which have been laid before the commission. My

report on the tender, and my remarks upon the objections raised by the contractor to the first draft of contract submitted to him. I refer to the draft contract Exhibit No. 105, now put in. My views were given, but they did not in all cases prevail. For these I am responsible, but not for the final form of the contract.

How the extra work was to be paid for according to the understanding that subsisted before the final execution of the contract, is to be seen and known, by reference to the word " yes", written by me, opposite paragraph No. 10 of the objections raised by Mr. McGreevy's legal adviser to the printed clause No. 7, embodied in the first draft of the contract. This remark having passed under the cognizance and consideration of the Commissioner, without further remark from him, I considered as approved. By this I say that it was understood that the extra work was to be paid for, under printed clause No. 7, (Exhibit No. 31,) according to the measurement and valuation of the engineer or architect in charge, which has been the usual practice always, and not by any fixed schedule of rates, for it is hardly possible to make any schedule that shall embrace all the contingent works arising out of large contracts such as these. Therefore I say that the attaching of a schedule to the contract with fixed rates for the extra work, was not in accordance with the written and approved remark of mine.

The printed form of contract referred to received its present form, and state of perfection from the several attorneys general through whose hands it has passed from the period of the Union, down to the present time. I have always considered clause No. 7, as the result of their combined knowledge and experience, that it was fair and just, and could not very well be improved upon or safely departed from. It was however designed rather for engineering than for architectural work, though applied to both, but the principle of paying the fair value of extra work, according to the estimate of the officers of the Department has always been recognized and acted upon. I understood Mr. McGreevy took exception to the parties designated, but not to the mode, and it was on this point that I opposed him, and that the Commissoner insisted, and it was also in reference to the clause, that I understood from the Commissioner that he had the difference with his colleagues.

It followed then that if the usual practice was to be observed in this case, the schedule of prices which was well known to be below the fair value of the work, was not to apply to extra work. With respect to the practice of having schedules of prices attached to building contracts, I have before said it is usual, but I should add, that it is not the invariable practice.

In order to inform the Commission more fully upon this point, I have taken occasion to refer to twelve of the leading contracts, which have been entered into for as many buildings from 1850 to 1861, and I now put in the notes I have myself taken from the originals in the office, (Exhibit 106), giving the names of the buildings, names of contractors, dates of contracts, and particulars regarding schedules. It will be seen that only two out of this number have schedules attached to them, and that one of them has two schedules attached to it, one for contract and one for extra work, the latter being at a higher rate than the former. In five other cases, schedules or rates were furnished with the tender, as called for, and although not attached to the contracts were in effect, adopted, and acted on in making estimates for contract and extra works. In one case the schedule was made by the architect, *pro rata* of the contract, and in the remaining four cases the only guide for making up the estimate was the printed clause No. 7 of the usual contract form. In contracts for engineering works there are always rates and prices given for the various kinds of work specified, and if any work is afterwards added, it is provided for under clause No. 7, and the engineer fixes the prices. This in my judgment is the most satisfactory course, and was followed throughout in the construction of the canals. But contracts for buildings are generally made for bulk sums, a practice which seems to possess the advantage of simplicity and certainty, but which in reality is neither so simple nor so certain as the former, for in the event of any change or addition, all the elements which entered into the original calculation of the bulk sum, must be taken into consideration, and it becomes very complicated. To avoid this difficulty a schedule of prices is desirable for the purpose of making the progress estimates and effecting a final settlement, and it

would be accepted and applied as just and right by both parties, provided contractors did not purposely undertake to do work for less than its actual value. Out of this condition of affairs arises a new case, to provide for which the expedient of having two schedules, one for contract, and one for extra work has in one of the instances before spoken of, been adopted by the Department. The 7th clause of the printed contract (Exhibit No. 31) is essentially the same as paragraph No. 10 of the first draft of contract (Exhibit No. 105.)

As regards the evidence of Mr. Cauchon I say with reference to the Longueuil accident, that the Grand Trunk Ferry Steamer plying between Montreal and Longueuil was blown up at Longueuil on the 10th June, 1856. The Act for the inspection of steamboats, 22 Vic. Cap. 19, was passed 4th May, 1859. I am surprised that Mr. Cauchon should be so ignorant of current events as to associate my name with this appalling accident, more especially as I am not a steamboat Inspector.

With respect to the Desjardins Canal accident on the Great Western Railway, it took place on the 12th March, 1857, two months and a half before the passage of "Accidents on Railways Act," 20 Vic. Cap. 12. And nearly six months before my appointment as Inspector of Railways under that Act. At the time the Accident happened; I was living at Brockville attending to my duties as assistant Engineer on the Grand Trunk Railway.

As it occurred before my appointment as Inspector of Railways, which took place on the 5th September, 1857, it was of course impossible that I could have had anything to say about the Bridge, one way or other as a Government Inspector. I was not then in the Government service, nor in any way connected with it for four years previously. During this time I never was called upon in any capacity to examine the work on the Great Western Railway, nor was I called upon or examined before the inquest. I am consequently utterly at a loss to conceive upon what possible ground, any person at all conversant with the history of current events in Canada, should presume to connect my name with this dreadful accident, and no one has any right to do so.

As regards the Dundas accident on the Great Western Railway, although I have the best reason to know, and am fully satisfied in my own mind, that my inspection of Railways under the Act, 20 Vic. Cap. 12, in the years 1857, 1858, 1859, has had a very beneficial effect in promoting the safety of travel by rail in Canada, I am not so presumptuous as to arrogate to myself infallibility.

While a Government inspection might reasonably be expected to conduce to the safety of travel which I know it has done, it is not therefore to be taken as a guarantee that there shall be no more accidents on Railways. In the nature of things, this is not attainable.

The Act expressly states that the inspection shall not relieve the Railway Companies of their responsibility or liability in case of accident, thereby plainly indicating that it was not expected that after an inspection had been made, there would be perfect immunity from accident.

My first examination of the Great Western Railway, as an inspector under this Act, was made in October, 1857, and my first order to that company was sent on the 19th of that month. I could see nothing about this bank where the land slide afterwards took place, to indicate any weakness. The regular trains had been running over it for four years, during which time it was reasonable to conclude that it was impossible for any one at that time, to foresee what has since happened.

In my report to the Railway Board of the 25th March, 1859, I stated "It was quite "impossible for any one, however qualified by previous training and experience, to say be- "fore the occurrence of this accident that the bank was in any danger, from the slight in- "equality of two feet in the level of the ditch; more especially as so many places can be "pointed out, both on this and other lines, where the same inequality exists and is in no "way dangerous to the stability of the bank."

These, then, are the real facts of the three cases adduced by the Hon. Jos. Cauchon, as his grounds for want of confidence in me as an engineer. I have shown that in two of

these, the most appalling in their nature, he was not only wrong, but altogether unwarranted in connecting my name with them; and in the third, that there is no ground for attaching blame to me personally. I am therefore content to place these facts on record, alongside the statements made by Mr. Cauchon, and to leave it to the Commissioners and the public to judge between us.

I trust that the services I have rendered my country in former years, as Chief Engineer of the Department of Public Works, during the 13 years from 1840 to 1853, in which our great public works were constructed, and which services are attested by the records of that Department are two well known to render it necessary for my future usefulness that I should enjoy Mr. Cauchon's confidence.

(Signed,) SAMUEL KEEFER.

JOHN PAGE, Esq., recalled, says:

Under the authority of an Order in Council, dated the 18th December, 1860, I made an inquiry into matters connected with the Public Buildings at Ottawa, and subsequently reported to the Department of Public Works on the subject. My report is printed between pages 199 and 236 of the Blue Book; it is dated the 20th April, 1861, and is prefaced by the following remarks, viz:

"It is however, proper to state that the severity of the weather, not only retarded "the business, but forced me to apply to the Architects and Clerks of Works for informa-"tion which at a more favourable season could have been personally obtained.

"The information thus furnished was carefully checked if possible, and will be used "in common with my own observations without further acknowledgment, except in special "cases."

On the 17th January, 1861, Thomas McGreevy contractor for the Parliament Buildings, handed me a statement of prices, which he considered should be allowed him for extra and additional work. This document I sent to the Architects, Messrs. Fuller and Jones for report. Their report and McGreevy's statement will be found from page 283, to 291 of the Blue Book.

My reply to Messrs. Fuller & Jones, acknowledging their report is on page 292 of the Blue Book, in which it is stated, "I agree generally with the suggestions therein con-"tained, and consider they should, so far as applicable, be embodied in the estimate now "being made."

On the 31st January, 1861, Jones, Haycock & Co., contractors for the Departmental Buildings, sent me a statement of the prices, which they considered should be allowed them for extra and additional work. This document, I sent to Messrs. Stent and Laver for report. Their report and the contractors statement will be found from page 295 to 309 of the Blue Book.

My reply to Messrs. Stent and Laver, acknowledging the receipt of their report, is on page 309 of the Blue Book, in which it is stated, "I agree with the suggestions therein "contained, and consider that they should, so far as applicable, be embodied in the esti-"mate now being made."

By referring to my letter of the 13th March, (1861, page 283 of Blue Book) written when submitting the contractors statements and architects reports above mentioned, it will be seen that previous to these reports having been prepared, the subject of prices had been freely discussed between myself and the Architects.

I make the foregoing statements in reply to the questions of the Commission, and not with a view of now qualifying or amending any statements contained, or conclusions arrived at in my official report on the Public Buildings, Ottawa, which statements, conclusions, &c., can only be thoroughly understood by a careful perusal of that document itself, and of the official corrdspondence connected therewith.

(Signed,) JOHN PAGE.

26th JANUARY, 1863.

MEMBERS PRESENT:

JOHN WILSON, Q. C., Chairman.

JOSEPH SHEARD, VICTOR BOURGEAU.

THOMAS GUNDRY, sworn:

I am an architect and civil engineer, and have followed the profession for seventeen years. I have been nine years in Canada. I was employed by the Commission to measure the Parliament building which I did with Mr. Bowes, Mr. Larose being present to assist in taking the dimensions. I began on the 16th July last, and finished about the middle of October, and since that time until to-day I have been engaged in making up my quantities, and entering the dimensions in the large book, into which all the entries are not yet copied. I received written instructions as to what I was to do, and as to the mode of measurement on the 15th day of July, 1862. I see copies of them in the letter book of the Commission of that date. Before I commenced I wrote to Mr. McGreevy as follows:

"I have been directed by the Commissioners appointed to enqire into matters relating to the government buildings here, before proceeding with the measurement of the work done to the Parliament buildings, to ascertain from you whether you are willing to accept the depth of foundations already taken by the Government measurer as correct. Your reply to this at your earliest convenience will oblige."

To this letter I received the following reply:

"I am in receipt of yours of the 15th inst., and in answer would say that I am satisfied with the depth of foundations taken by Mr. Bowes, the Government measurer, and consider them correct."

(Signed,) THOMAS MCGREEVY,
per ROBERT MCGREEVY.

Besides these instructions I was directed to measure superfluous work with the contract plans, and reqirements of heating and ventilation taken as the standard, and no earth work to be considered superfluous. I was directed not to cube the Nepean facing, but to measure it on the superficies of the walls, when it had been substituted for limestone facing. On the 19th September I had further instructions in writing, a copy of which I also see in the same letter book. Upon these instructions I carefully measured all the work with Mr. Bowes, Mr. Larose holding the tape line or rod, and I noting the dimensions, as well from their calling them out, as my own inspection of the measurement in most cases.

I caused pits to be sunk to the bottom of the foundations, and I found them to agree generally with the depths referred to in these letters. In the boiler house I found the foundations deeper by four inches which I allowed in the measurements. I measured the excavations by the cubic yard; rubble masonry by the toise of 54 feet, except in the ducts and drains, which I measured by the cubic yard. They are easily convertible, for two yards make a toise by this mode.

I measured cut stone, Nepean facing and all openings in with the rubble masonry in the building. These openings measured only to the springing of the arches, make 567 toise, which is in favour of the contractors. I measured the rubble masonry in the ducts and drains, as it actually is found, measuring the cut stone in with rubble masonry. I allowed once and a half measure for the arches. I measured the pick faced stone work in the boiler house ducts and drains, on the face only, and the skewback with the straight work. The arches and inverts were measured with the circular work. In measuring the

Brockville and and Ohio cut stone, I first cubed it to its extreme dimensions for the stone. I then measured the labour on the whole visible face, classifying it as I found it in the work. I measured the brick work by the thousand, at 20 bricks to a standard foot of three half bricks in thickness, as I understood the instructions.

The openings of doors, windows and fire-places were deducted to the springing of the arches; the flues were allowed as solid work. The vaults I measured by the superficial yard of two half bricks in thickness according to the schedule. The rolled iron joists I calculated by the ton at the weights per foot given in the schedule to the contract except the twelve inch joists, one of which was weighed to ascertain the weight per foot.

I measured all the work I found in the building, and all the work I found prepared, and all the material on the ground, except a small part of these materials and work, which were measured by Mr. Bowes alone. I measured the plant and sheds, and I noted all my work in my books in minute detail. From these I made up my quantities and put them in the estimates of work done, work prepared, and material delivered. The estimate of work yet to be done, (Schedule D) is taken from the contract plans, and from the reqirements to complete the buildings in the style begun. The works in this estimate are rated at prices fixed by the commission, which, so far as they are executed, correspond with those attached to their valuation of the work done. I deducted half openings in the plaster work, and allowed no mitres in the cornice. All the paint work I estimated by the superficial yard.

I had good opportunities of seeing and examining the work done, it is generally good, except the brick work. It is pretty good in the basement, but above that it is far below the requirements of the specification both as regards material and workmanship. The iron joisting has in some instances been placed at irregular distances, and in excess of the specified width apart. I do not think the cornice has sufficient bed on the wall, but it has more than the specification required. I do not think it was prudent to put Ohio stone of the kind used in the plinths, at the base of the entrance tower.

I have calculated all the quantities of work mentioned in the contract, done and yet to be done, and I have applied the prices mentioned in the schedules attached to the contract, and at proportionate prices, for work not mentioned in the schedule. I find that they are 31 per cent too high, that if all the contract work was paid upon these prices, it would amount to $457,989 instead of $348,500.

The building could be made fit for use by leaving out all the work not necessary for actual convenience, for about 40 per cent less than would finish it. I think the rates on the whole fair, at which the Commissioners have valued the work. In the superfluous work I have put the pick-faced masonry of the boiler house and ducts, but all the superfluous work, I placed first in the work done, and then in a column by itself, it has all been priced and allowed as work done.

The schedule A is the estimate of work doue, ths quantities are correctly taken from my measurements, and correctly classed under the proper heads. As shown there the contract work is rated at contract prices, the extra and additional, and heating and ventilating at the architects prices. The total of all work, is rated at the prices fixed by the Commissioners. Schedule G shows the work prepared, and schedule H the material delivered rated in the same manner as schedule A. Where there were no prices in the contract schedules for certain descriptions of work, proportionate prices were supplied.

(Signed,) THOMAS GUNDRY.

27th JANUARY, 1863.

MEMBERS PRESENT:

JOHN WILSON, Q. C., Chairman.

JOSEPH SHEARD, VICTOR BOURGEAU.

JOHN BOWES, recalled:

I have read the evidence of Mr. Gundry, and I say that he has truly stated the mode we measured the work. All the work of every kind, and all the materials were carefully measured in the manner he states. The measurements and statement I believe are correct. I account for the difference of quantities made by me under Mr. Killaly and the present quantities as follows:—

I measured for Mr. Killaly the face, beds, and joints of the pick-faced and cut stone work. I have them separately. The face work was substantially the same in both measurements, say 51,000 feet face, but the beds on the same were 85,000 joints 28,000, wall say 164,000 feet, by Mr. Killaly's mode out of 51,000 feet. The difference in masonry arose in this way; the ducts and drains I measured solid in the excavations, at their extreme dimensions. I measured all walls under two feet as two feet. The difference in the brick work arose in this way, but chiefly between the standard and cube foot, which of itself makes a difference of above 800,000 bricks. But if the lining is one brick, part half, but I measured all as one brick for Mr. Killaly. I measured the brick walls, as if carried up to the height of the stonework, as it was understood Mr. McGreevy was to do it before he stopped the work, but he did not do it. I measured the arches as one and a half measurement, the difference between the measurement for Mr. Killaly and the present, is over a million of bricks.

The measurement for Mr. Killaly of the Ohio stone was plain face upon moulded and sunk work, about 17,000 feet, the beds and joints were 22,000 feet, on extra work, about 6,000 feet. In some respects the present measurement exceeds Mr. Killaly's. The chamfered in brick, in the former measurment was 100 feet, the present 2703 feet. In the extra work, sunk face, Ohio stone, per present measurement makes 5084, the former 2092 feet. In sunk face circular the present measuremt is 1575, the former 673 feet. The rock faced work in the Library was measured by me for Mr Killaly, with bed and joints, beds and joints were 6,000 feet. There is about 25 per cent between the Ohio stone returned by me for Mr. Killaly and the present measurement. My return to Mr. Killaly was from Mr. Page's estimate, and the shipping bills subsequent to that. Mr. Gundry cubed the extreme dimensions for the stone in the finished work, but there would still be a falling off in the amount of that from the second measurement. The flagging covering the ducts south of the building I measured for Mr. Killaly thus: the cubic contents of of the flagging as limestone there, the joints as worked, and the setting as rubble masonry In the present measurement it is measured merely as flagging at a given price, including dressing and setting.

The moulded extra work by the present estimate	1206 feet.
By the former	959 "
Sunk circular by the present estimate	1576 "
By the former	527 "
Chamfered by the present estimate	262 "
By the former	80 "
Stops by the present estimate	100 "
By the former	None.
Iron in lintels and chimney bars by the present estimate	10215 lbs.
By the former	9105 "

Yellow pine lintels by the present estimate	6291 feet.
By the former	3007 "
Lath centreing by the present estimate	3329 yds.
By the former	13430 feet.
Nepean facing extra of rubble by the present estimate	16107 "
By the former	4145 "

The former measurement was made by me alone, and hurriedly, the present one by Mr. Gundry and myself, Mr. Larose assisting with the tape.

The schedule H is the estimate of all work of every kind by Mr. McGreevy, measured by Mr. Gundry and myself, the schedule *A* is the amount of day bills allowed to Mr. McGreevy as extra in the progress estimates.

The Schedule I is the statement and measurement of the work prepared for the Parliament Building. I measured it with Mr. Gundry, except a small portion of it which I measured with Mr. Larose.

The Schedule D is the estimate of work yet to be done on the Parliament Building I believe it to be correct. I took off the quantities with Mr. Gundry, and they are correct to the best of my knowledge.

The Schedule H is the state and measurement of the material on the ground, and in the Brick yard for the Parliament Building. I measured this with Mr. Gundry, except a small part of it, which I made alone.

The masonry in the ducts and drains roughly measured as solid work, was 8744 yards, instead of as by the present measurement 4643 yards, but in the former measurement was included the filling up of the holes on the top, and the extension of the ducts to the brow of the hill.

(Signed,) JOHN BOWES.

JOSEPH LAROSE, recalled:

I assisted Mr. Gundry to measure the Parliament Building, and all the work connected with it. I held the rod and tape line correctly, and I called out the exact measurements as they were.

I say all the work done of every description was measured, nothing was omitted, and the dimensions taken were correct to the best of my knowledge. I say I assisted to measure all the material on the ground, and the dimensions of this were correctly taken.

I was not present at the measurement of material in the Blacksmith and Joiners shops.

(Signed,) JOSEPH LAROSE.

WILLIAM HUTCHISON, recalled:

I measured all the plant in the brick-yard for the Parliament Building, and all the brick in brick-yard of that building made on the Government ground, and I valued them. The brick I now speak of, are those mentioned in schedule H. The plant in the brick-yard is the schedule I; the measurements and value are correct. I measured all the plant for both Departmental Buildings, and the plant in the brick-yard, and valued it to the best of my knowledge. It is correctly measured and valued, and is contained in schedule M, signed by me.

I measured the work prepared, and material on the ground for the east Departmental Building, except a few piles of lumber measured by Mr. Pelham; it is all correctly made up in schedule K, signed by me, together with the bricks in the brick-yard for both

buildings. I measured the work prepared and the material on the ground for the western building; it is correctly made up in schedule L, signed by me.

Schedules b. c. are the day bills which were allowed the contractors extra, as the work was going on.

There are three air ducts in the west front, two on the south front, and one on the east front of the eastern Departmental Building, all come through to the front of the external wall, except two on the west front. The northern one is finished about 60 feet west of the building, the southerly one about 35 feet. They are under ground, and have no external opening, and are not drained, without which they are useless.

I think the stone from the excavations were worth $3.25cts. per toise of 216 feet; and that in order to return the whole excavated, into available stone, two-fifths of it should be deducted. I think also, that the price allowed by the Commissioners for rock excavation, a large price. I have not seen any of the other prices allowed.

(Signed,) WM. HUTCHISON.

ADOLPHE LEVEQUE, sworn:

I am an Architect. I have been practising about ten years in Montreal. I was employed on the Commission to measure the Departmental Buildings. I commenced to measure the eastern Departmental Building on the 16th July, 1862. I measured all the eastern Departmental Building, and from the upper floor upwards of the western Departmental Building. I finished my measurements about the middle of October. I have since been making up my quantities. I had the same instructions as Thomas Gundry, Esq., written and verbal, and upon my instructions I made the measurements.

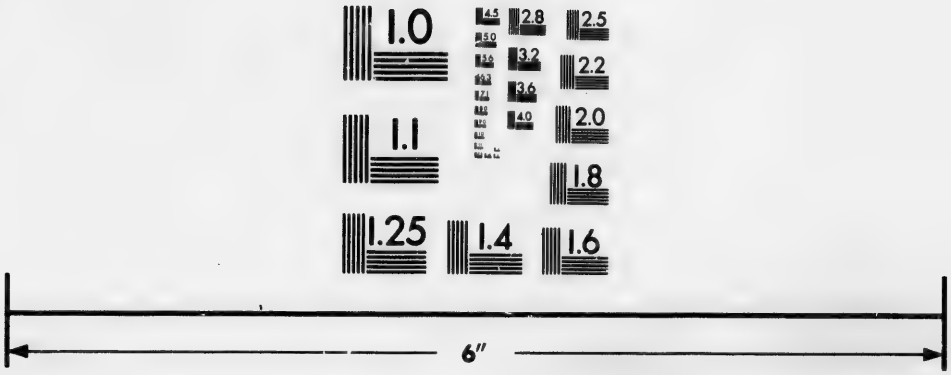
I measured all the work of every kind, on the buildings. J. H. Pattison, measurer for the Department of Public Works, and William Hutchison, Clerk of Works for the eastern Departmental Building, assisting me. I took down the quantities. I saw the meraurements on the rod myself, as well as heard them called out by them. I measured correctly all the work done of every description on the eastern Departmental building. I omitted nothing, to my knowledge. I made the entries in my book from which I made up the schedule marked B, and signed by me. It contains a true statement of the different kinds of work done on and connected with the eastern Departmental building. I measured all the work done on that part of the building correctly. I omitted nothing. I entered the measurement of quantities in my book from which I made that part of the schedule marked C, which I signed at top and bottom, it contains a true statement of all the work on that part of the building classified.

The superfluous work in the columns headed superfluous work, is all included in the total. This work I call superfluous. I estimated taking the plans as the standard, and the requirements of the work. There is not much superfluous work in the interior of the buildings, and I found none in the part of the western Departmental building I measured. The superfluous work is in the ducts and drains outside the buildings, and arose I think from the want of plans and systems in carrying on the work. It is in the masonry and principally pick-faced work that the superfluous work is. The excavations are filled with solid masonry instead of two feet walls, and earth filling behind them to the rock.

I took out quantities correctly of all work yet to be done on the eastern Departmental building from the upper floor up. These quantities and the prices of them rated as directed by the Commissioners are in schedules E and F. The schedule E is the estimate of work required to be done on the eastern Departmental building, amounting to $209,862.05 at the prices set by the Commissioners. The works done on the contract, and as extra and additional, and all classes of work are properly classified.

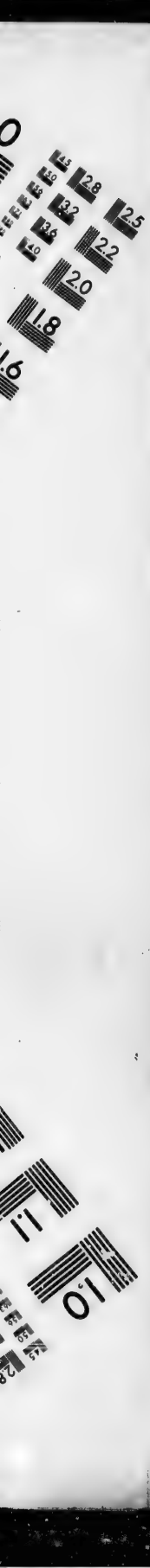
All the work is correctly classified in the columns in these schedules B. C. E. F.

IMAGE EVALUATION
TEST TARGET (MT-3)



Photographic
Sciences
Corporation

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503


2.8
2.5
3.2
3.6
2.2
4.0
2.0
1.8
1.6
1.1
1.0

and rated at the price in the columns adjoining the quantities therein. In estimating the work Mr. Pattison and I had to make plans of certain parts of the work, they are numbered 1 to 13 inclusive. They show the manner in which the work is to be done, as estimated in the work yet to do. I think the departmental buildings could be made fit for use, but without any ornamental finishing for 20 per cent less than the estimate. The same prices and modes of measurement are applied to the work yet to be done, as applied to the work done under the head "Commissioners prices", but in the work to be done, are kinds of work not yet done, but the prices are in the column next to the quantities in the schedules at which I rated the work. I measured in with the rubble masonry, all openings and cut-stone work. I allowed 20 bricks to the standard foot, of a brick and a half wall. I measured the Nepean facing as it is found on the face of the wall, but it is measured in with the rubble masonry also. All the rubble masonry is reduced to the yard, two of which make a toise of 54 feet. I measured the pick-faced work by the visible face, distinguishing the plain faced from the circular.

All the different kinds of work are properly classified in the schedule. The depths of the foundations agreed with those formerly taken, and with which Messrs. Jones, Haycock & Co., were satisfied.

(Signed) ADOLPHE LEVEQUE.

JOHN HENRY PATTISON, recalled:

I assisted Mr. Leveque to measure all the work he measured on the western Departmental building, and from the upper floor upwards on the west departmental building. The measurements were made under the same instructions as those given to Mr. Gundry, and are correctly made in accordance therewith. Nothing has been omitted, and all the work correctly classified and entered in the schedules B, C, E, F. The prices applied to contract work, are those mentioned in the schedule attached to the contract. Extra and additional as well as heating and ventilation are rated at the architects prices in the respective columns, but in the total quantities column, the work is rated at the Commissioners prices. All the prices applied to every kind of work appear in the schedules.

(Signed,) J. H. PATTISON.

29th JANUARY, 1863.

MEMBERS PRESENT.

JOHN WILSON, Q. C., Chairman.

JOSEPH SHEARD, VICTOR BOURGEAU.

JOHN HARPER, sworn:

I am a builder, and have been engaged in it about 33 years, in Toronto chiefly. I was employed to measure the western Departmental building by the Commissioners. I came to Ottawa on the 30th August, and have been here ever since except ten days. I finished the measurement in October, and have ever since been revising my measurements, and making up my quantities which I finished to-day. I had the same instructions as Mr. Gundry, and measured in the same mode, the Western De-

partmental building up to the second floor. The quantities I entered in my memorandum books, from which I carefully made up the estimate marked C, so far as it relates to that part of the building done by me which I have signed. The work of every kind was all measured and classified as in that estimate, it is correctly done as the estimate shows. I was assisted by Mr. Pelham in making the measuremenis. I estimated the work yet to be done on that building in detail at the prices set by the Commissioners, the quantities detail, and prices of that work, are correctly entered and classified in schedule F., signed by me. I say all the measurements and estimates are correct so far as I know. I think the prices set by the Commissioners are fair, and would be reasonably remunerative.

(Signed) JOHN HARPER.

GEORGE BROWN PELHAM, recalled:

I am clerk of works for the western Departmental buildings. I assisted Mr. Harper to measure that building up to the second floor. He measured all the work of every description, and entered the quantities in the estimate C, so far as it relates to the work up to the second floor, and it is correct so far as I know in every way. I assisted Mr. Harper to take out the quantities, and make the estimate F. of work yet to do on that building. This estimate is in detail, and is correct as I believe. The prices of the work are those mentioned in that estimate and were fixed by the Commissioners. I think the prices generally fair. but not high, and on the whole would be remunerative. I think 15 or 20 per cent of the work in this estimate might be left undone and the building made fit for use. The towers and the grounds, and some of the internal fittings so far as they relate to bells, gas, and rooms in basement, might be left for the present. The prices set for the work done and the work to do, are the same in so far as as they are applicable,

(Signed,) GEORGE B. PELHAM.

EXHIBITS

REFERRED TO

IN THE EVIDENCE

TAKEN BY THE COMMISSION.

EXHIBIT, No. 1.

St. Catherines, 12th October, 1859.

Dear Sir,—In order that there may be no delay or uncertainty about the delivery of the plans and specifications of the Parliamentary Buildings at Ottawa, at the office of the Department of Public Works in Quebec, on the day mentioned in the public notice, namely, Saturday the 15th instant, I have to request that you will receive them from the Architects and take them down by the Express train, which goes through to Quebec, on Friday the 14th instant.

And as you are now informed in regard to these plans, &c., from having examined them, and from personal communication with the architects and myself, I beg further to request that you will remain at the office in Quebec, to render explanations in regard to them.

Should any questions in relation to these arise, materially affecting their interpretation or the conditions of the contract, you will have them and their answers put in writing, and the answers approved by the Commissioner or his Deputy; and should reference to the latter be necessary, you can communicate with him by telegraph at Brockville, on Monday, A.M., at Montreal on Tuesday, A.M., and Wednesday P.M., and he will be in Quebec on Thursday next.

Accompanying this is a letter of introduction to the Commissioner, which you will please deliver as soon as you arrive in Quebec.

I remain, yours truly,

Samuel Keefer,
Deputy Commissioner P. W.

Mr. John Morris,
C. W., Toronto University, Toronto.

EXHIBIT, No. 14.

No.

To

Contractor for the Government House,

Ottawa,

You are hereby requested to

NOTE.—All works ordered herein, are to be done in the best manner, and subject to the general terms of the Specifications and the Conditions of the Contract.—(See clause No)

No. GOVERNMENT BUILDINGS,

Ottawa,

To

Contractor for the Government House.

You are hereby requested to

Clerk of the Works.

Architects for the Gov't. House.

Approved,

Comm'r. of Public Works.

EXHIBIT, No. 2.

BOOKS OF SPECIFICATION PARLIAMENT BUILDINGS.

EXHIBIT, No. 3.

OTTAWA, 28th May, 1861.

SIR,—Referring to the letter addressed to you on the 16th instant by the the Secretary of the Department, in which, for the reasons therein stated, you were informed that you are no longer to have any authority in connection with the expenditure of money, or the certifying of accounts, and that your duties henceforward will be confined to the practical supervision of such parts of the works as the Deputy Commissioner may point out. I have now to acquaint you that it is considered necessary you should in future confine your attention exclusively to the Parliament Buildings, and act altogether under the orders of the architects of those buildings, without exercising any authority over the other Clerks of Works.

It will therefore be your duty, the same as of Mr. Grist and Mr. Larose, the other Clerks of Works on these buildings, to see that the orders of the architects are strictly carried into effect—track out the works from the plan—to see that none but the best class of materials are used in the buildings, and that the workmanship throughout is well executed—to make measurements of all works performed—to keep the time of the men employed upon the works, to the contract and extra, and such other memoranda in relation thereto, as the architects may deem necessary or expedient.

To admit of you giving closer attention to the execution of the works, you will be relieved to a certain extent from making out details and results of measurements, which duty will hereafter devolve upon the measurer, Mr. Bowes, who has been appointed for that

special purpose; but you are nevertheless required to afford him such assistance and explanations as may be necessary to a perfect elucidation of all previous measurements and returns.

Having observed some notices in the public papers of this city in reference to visitors, and the preservation of the grounds under your charge, and considering that such notices are no longer necessary, I have to request that you will discontinue them; that you will procure and certify the bills for the same, and so put an end to any further expenditure on this account

I have the honor to be, sir, your obedient servant,

SAMUEL KEEFER,
Deputy Commissioner of Public Works.

Mr. John Morris, Clerk of Works,
Parliament Buildings, Ottawa.

EXHIBIT, No. 4.

PARLIAMENT BUILDINGS,
OTTAWA, June 1st, 1861.

SIR,—We have received a letter from the Deputy Commissioner, bearing date the 26th May, 1861, enclosing a copy of a letter of instruction addressed to you.

In order to render your duties distinct and to avoid any mistake in the future, we have to request that you will take charge, as Clerk of the Works, of that portion of the building tinted red on the accompanying diagram.

Your duties are very distinctly detailed by the Deputy Commissioner, especially as regards keeping authentic time lists for any additional works executed under our written orders.

You will please keep a daily diary of the progress, &c., of that portion of the works under your charge.

You are distinctly to understand that you will be held responsible for any mistakes or defective work of any kind.

We are, sir, your obedient servants,

FULLER & JONES,
Architects.

To Mr. John Morris, Clerk of the Works,
Parliament Buildings, Ottawa.

EXHIBIT, No. 5.

PROGRESS ESTIMATES.

EXHIBIT, No. 6.

Parliament Buildings.—List of Drawings issued as dated below.

1860.

May 28—1—Section of Basement Window—William Johnson.
June 11—2—Jamb of archway, Main Tower—R. Glaister.
" 2—Two drawings and elevation—R. Glaister.
" 3—Section of main plinth—R. Glaister.
" 23—4—Section string over ditto—R. Glaister.
" 26—5—Detail of ground floor windows—R. Glaister.
" 6—Detail of basement windows under angle towers of wings—R. Glaister.

such assistance and ex-
ious measurements and

ty in reference to visit-
considering that such
discontinue them; that
end to any further ex-

t,
L KEEFER,
sioner of Public Works.

BUILDINGS,
, June 1st, 1861.

r, bearing date the 26th
ou.
take in the future, we
of that portion of the

issioner, especially as
uted under our written

portion of the works

le for any mistakes or

ER & JONES,
Architects.

d below.

wings—R. Glaister.

June 27—7—Detail of basement windows, angle towers, frame, sill, sash and bar, full size—W. Johnson.
July 2—8—Plan of jamb of doorway, centre tower—R. Glaister.
" 3—9—Details of Post Office entrance door and windows—R. Glaister.
" 4—10—Plan of jamb and arch mould of windows on either side of main tower, full size—R. Glaister.
" 4—11—Elevation and section of windows on either side of main tower,—scale 1 in. to a foot—R. Glaister.
" 5—12—Details of windows under stairs for public, elevation internal and external, and section and plan of jamb, full size—R. Glaister.
" 5—13—Elevation and section of windows on ground floor, south front—R. Glaister.
Aug 25—14—Detail elevation of centre portion, south front, ¼ in. scale.
" 25—15—Detail do. of wing, south front
Oct. 1—16—Detail full size of stancheon and saddle bars for windows on either side of main tower.
Nov 12—17—Plan of pillar at side of staircase windows, south front and base mould do.—R. Glaister.
" 20—18—Spandril over doorways of main tower—R. Glaister.
" 20—19—String over Committee room windows—R. Glaister.
" 29—21—Drawing of jamb and lining, and architrave for basement doors, full size—Jas. Knox.
Dec. 3—22—Doors for basement of wing, south front—Jas. Knox.
" 11—23—Detail of window sashes and frames for basement windows, south front wing. Full size detail of window frames and architraves for inside—Jas. Knox.
1861.
Jan. 6—24—Doors in saloons, dining and sitting rooms and passage adjoining, with sections of panel moulding and architraves, full size, number of doors written on plans—Jas. Knox.
" 15—25—Elevation external and internal of windows over entrance door of tower, ½ in. to foot. Plan and section of do—R. Glaister.
" 15—26—Section of jamb and hood mould and sill and elevation of trefoil in sill and section of string at springing of windows, full size—R. Glaister.
" 30—27—Sections of upper cornice of main building, except library. Section of cornices for main tower at same level and also for angle towers—R. Glaister.
Feb. 8—28—Detail dormer windows, south front, with section of corbels under do., full size, 42 of them. Returned April 5, '62—Jas. Knox.
" 20—29—Jamb of staircase windows, full size—R Glaister.
" 20—30—Elevation of do. inside and outside, ½ in. to foot—R. Glaister.
" 20—31—Section and elevation of sill—R. Glaister.
Mar. 4—32—Detail of doorway to messengers' rooms, east and west wing, north front—R. Glaister.
" 4—33—Arch mould in doorways of members and clerks and sergeant at arms and black rods, entrance, full size—R. Glaister.
" 4—34—Elevation of do., 1 in. to foot.
" 19—35—Elevation of windows in central court and windows to Gov. General's and Chaplain's Rooms, 2 for W. C's do., and 6 windows to corridors looking into central court—R. Glaister.
" 26—36—Elevations of Windows first floor, ½ in. to foot, and plan of jamb, full size—R. Glaister.
April 9—37—Frame and sill committee room windows, full size, 59 windows—Jas. Knox.
" 19—38—Dormer windows, angle towers, 2 to foot, 38 in number—Jas. Knox.
" 19—39—Lead of cap of staircase windows—C. E. Zollikoffer.
" 29—40—North elevation of east wing, ¼ to foot, giving figured dimensions for centres of windows—John Grist.

May 9—41—North elevation of west wing, ¼ to foot, giving figured dimensions, centres of windows—Joseph Larose.
" 9—42—Pillars in Public Hall, plan and elevation, ¼ in. to foot—R. Glaister.
" 23—43—Bases and caps of pillars in Public Hall and arch mould do., full size, and chamber of jamb—R. Glaister.
" 27—44—Elevation and plan of pillars and arches in saloon and full size detail of mouldings of do. west side of building—R. Glaister.
" 29—45—Windows in central court basement, ½ in. to foot—R. Glaister.
June 4—46—Windows in Public Hall, west side, ¼ in. to foot—R. Glaister.
" 6—47—East elevation of main building from back of wing to Speaker's tower, inclusive, ¼ in. to foot—Joseph Larose for R. Glaister.
" 24—48—West elevation of main building from back of wing to Speaker's tower—Joseph Larose.
" 8—49—Entrance door and cartway, E. W. front, ½ in to foot, jamb and arch mould same as Post Office door—R. Glaister.
" 8—50—Windows of members' stairs to basement, 1 in. to foot, with detail of jamb and sill outside and inside elevation and section—R. Glaister.
" 8—51—Windows first floor, E. and W. court yard, ½ in. to foot, plan, section and elevation—R. Glaister.
" 11—52—Windows under reporter's entrance, ½ in. to foot, plan, elevation, outside and inside section—R. Glaister.
" 12—53—Plan of rooms on ground floor, west of Legislative Assembly—Joseph Larose.
" 20—54—Plan and elevation outside and inside of window, ground floor, for rooms east of Legislative Council and west of Legislative Assembly, ½ in. to foot, jamb and arch mould and sill, full size, twenty-six windows—R. Glaister.
" 20—55—Windows in mess room, library ground floor, ½ to a foot, jamb and arch mould full size, three windows in each compartment and eight compartments and doorway, west side, with jamb mould full size, F. & J., 13th July, 1861—R. Glaister.
" 22—56—Plan of first floor main tower, with elevation of internal arches, ¼ in. to a foot—Joseph Larose.
" 22—57—East elevation of main building from back of wing to speaker's tower, ¼ in. to a foot—John Grist.
" 22—58—Ground floor plan of rooms, &c., north of Legislative Assembly, scale 4 ft. to 1 inch—John Grist.
" 22—59—Ground floor plan of rooms, &c., north of Legislative Council, scale 4 ft to 1 inch—John Grist.
" 25—60—Arches in basement members' stair under speaker's entrance adjoining member's entrance, figured dimension—John Grist.
" 25—61—Plan of room on ground floor east of Legislative Council, scale 4 ft. to 1 inch—John Grist.
" 25—62—Staircase pillars in public hall, scale 4 ft. to 1 inch, plan, &c., elevation, showing tracery windows.
" 25—63—Plan of east wing scale, 4 ft. to 1 inch—John Grist.
" 25—64—Plan and elevation of saloon in basement, east side of building, scale 4 ft. to 1 inch—John Grist.
" 26—65—Weatherings to boltresses of Library, 1 inch to a foot, detail of moulding to do., full size—R. Glaister.
" 27—66—Doorway to reporters' entrances, E. and W., and speaker's entrance, the doorway to latter to be 4 foot wide—R. Glaister.
" 24—67—Quatrefoils in cornice of main tower over first floor windows, 1 inch to a foot, section of mould full size—R. Glaister.
" 29—68—Windows in W. C. speaker's apartments, plan, elevation outside and inside and section, 1 in to a foot, plan of jamb full size—R. Glaister.
" 29—69—Window for basement stair library, 1 in. to ft., (original)—R. Glaister.

July 4—70—Plan of stair and arcade public hall, scale ¼ in. to a foot, arch mould and jamb mould of archway to public stairs full size, corbels for support of beams of roof full size, (tracing)—R. Glaister.
" 5—71—Main tower compartment over committee rooms, elevation and section, ½ inch to a foot—R. Glaister.
" 5—72—Elevation and section jamb caps and bases and arch mould, full size—R. Glaister.
" 9—73—Windows in walls of members' lobby, west of Legislative Council and east of Legislative Assembly, plan, elevation and section, ½ inch to a foot, sill and jamb mould full size—R. Glaister.
" 10—74—Corbel under beams of ceiling in public hall full size—R. Glaister.
" 11—75—Elevation of arches in south wall members' lobbies, ½ inch to foot, same drawing repeated—Joseph Larose.
" 12—76—Section and elevation of staircases for library ½ inch to foot, with jamb and mullion of windows full size—R. Glaister.
" 12—76—Section and elevation of staircases for library, ½ inch to foot (tracing.)
" 31—77—Stair from boiler house, scale 4 ft. to 1 in.—R. Glaister.
Aug 10—78—Cornice over wardrobes full size.
" 12—79—Sashes committee room window—F. X. Larvie.
" 17—80—Design for boiler fronts.
" 17—81—Plan of boiler house.
" 17—82—Section of boiler house.
" 17—83—Elevation showing brickwork between boilers and section through boiler.
Sep 3—84—Elevation and section of passage from reading to smoking room, and detail of cornice full size—Joseph Larose.
" 11—85—Corbel angle towers, 3 in. to foot—R. Glaister.
81, 82, 83 } Plan and section of boiler house—Joseph Larose.
" 26—87—Stops and chamfers to marble pillasters in Legislative Hall, full size.
Mar. 1—88—Piers and columns in Legislative Hall, ½ inch to foot, section of moulding full size—W. Haughey.
" 8—89—Elevation of doorways, ½ in. to foot, to Legislative Hall and plan of marble jamb full size—W. Haughey.

Plans delivered to Mr. Gundry, measurer, appointed by the Commissioners as by orders received from the Secretary by the Commission.

1862.

July 15—90—Drawing No. 2 plan of foundation under basement floor—Thos. Gundry.

EXHIBIT, No. 7.

(Copy.) Order, No. 1.—Government Buildings.

To Messrs. Jones, Haycock & Co.,
Contractors for the Departmental Buildings.

Ottawa, 28th February, 1860.

Gentlemen,—You are hereby requested to continue the surface excavations under the suites of rooms of both blocks of the Departmental buildings next Wellington street, to admit of future use, for those portions of the basements; also to excavate trenches for all walls, piers, &c., of both blocks down to the rock, and level the same; and also to excavate for Boiler Houses, and other works required in connection with the contract for heating and ventilating continue the walls down to the rock in every case, and make door ways, windows and fireplaces to the suites of rooms in those portions of the basements above mentioned.

(Signed,) Stent & Laver.

Delivered this day, tenth of March, 1860.

EXHIBIT, No. 8.

OTTAWA, June 19th, 1861.

SIR,—In reference to the framing of the timbers of roof to the Departmental Buildings in accordance with the Plans and Specifications, I am directed by the Architects to enclose you the following extract from a letter received by them from the Department of Public Works.

"It will be the duty of Clerks of Works, as heretofore, to see that your orders (the Architect's,) are strictly carried out,—to set out the works from your plans,—to see that none but the best class of materials are used in the buildings, and that the workmanship throughout is well executed,—to make measurements of all work performed,—to keep the time of the men employed upon the works, both contract and extra, and such other memoranda in relation thereto, as you may deem necessary or expedient."

I am, Sir, your obedient servant,
(Signed,) DOUGLAS BARRETT,
For the Architects.

To Wm. Hutchison, Clerk of Works,
Eastern Departmental Building.

EXHIBIT, No. 9.

OTTAWA, June 19th, 1861.

SIR,—Our attention having been called this morning to the timbers for the roofs of Departmental Buildings, we find that the Queen posts are all prepared and delivered on the ground of a less size than is specified and shewn by the drawings.

In making your monthly return of materials delivered it is your duty to see that they are in all respects according to the plans and specifications, and in a matter of such moment as that of roof timbers, upon which a large advance is made by the Department, we feel that severe reflections will be made by the officers of that Department, and we hope that especial care will be taken to guard against such an omisssion in future.

We are, Sir, your obedient servants,
(Signed,) STENT & LAVER,
Architects

To Wm. Hutchinson, Clerk of Works,
Eastern Departmental Buildings.

EXHIBIT, No. 10.

OTTAWA, July 6th, 1861.

SIR,—It was only last evening that I saw the enclosed letter which you sent us, during my absence at Quebec.

We cannot receive such a letter from you; any remarks, bearing upon the work, which you may wish to make, we shall be glad at all times to receive; and it is your duty to inform us of any and every matter requiring comment or notice from us, in connection with the buildings. But if you wish to make any statements that are personal to ourselves, we must beg you to address them to the Department.

I am, sir, your obedient servant,
(Signed,) THOMAS STENT,
For self and partner

Mr. Wm. Hutchison, Clerk of Books,
Eastern Departmental Building.

EXHIBIT. No. 11.

Messrs. Stent & Laver, Ottawa, 21st June, 1861.

Gentlemen,—I have received your two letters, dated respectively 19th inst., from the tenor of the one you state that I have not performed the duties required of me efficiently in having allowed the timbers for the Queen posts of the roof to be delivered of a less size than is specified and shewn by the drawings and in making my monthly returns, &c., it is my duty to see that all materials delivered are of the proper quality, measurements and scantling.

You are well aware that I made no monthly measurements of lumber delivered (with one or two exceptions) the estimates were made up from Mr. Haycock's bills of lumber delivered. I have stated to you, for months past, that part of the lumber delivered and credited in the estimates, is being used for plant, and no lumber has yet been delivered suitable for *finishing* for at least two years to come.

Notwithstanding these statements, doors are being framed of said lumber that in my opinion will fall to pieces in 6 months after the building is heated with hot air.

Last winter I was called to account by Mr. Page, about a descrepancy in earth excavation. I know that there was an over measurement in excavation and had called your attention repeatedly to the discrepancy during the summer, of which no notice was taken until it was too late; I am afraid it will be so with the lumber in both measurement and quality when the testing time comes, unless attended to at once.

With regard to keeping the times of men employed on contract and extra work separately, I consider it an impossibility, as contract and extra work occur sometimes in a brickwall of 18 thick, and these walls dispersed throughout the whole building, an aproximation of the number of men employed may be arrived at, but to do it correctly the whole of my time would be employed.

I remain, gentlemen, your obedient servant,
(Signed,) Wm. Hutchison.

EXHIBIT, No. 12.

Toronto, 28th December, 1861.

Gentlemen,—I have to beg you will be so good as to let me have a copy of the estimates we concluded on in Quebec, for the general completion of the Departmental blocks of buildings under your charge. I send herewith the rough plans of each. On referring to the ground plan of the western block you will see, that in the portion devoted to the Public Works Department, no change at present is proposed. In that for the accommodation of the Inspector General, six of the cross walls are proposed to be taken away, as also the corresponding walls in the upper story, in which the Crown Lands Department is to be. It is proposed to fit up in the attics of both the Crown Land and Public Work portions some two or three long rooms, suitably lighted &c, for drawing and map rooms, photography, &c. You will please so divide your estimates, as first, to give the cost of finishing the buildings as commenced, then to show the cost of the proposed alterations, and also, that of fitting up and providing for the accommodations in the attics, called for by the Public Works and Crown Land Departments. The cost of suitable front fencing, with gates &c., forming of ground, surface draining of ground, and side fencing on each side to a line drawn parallel with the front of the Parliament buildings, and say 50 feet from it this item also to be separate, as also that of forming the portion of the grounds bounded as above. I do not want these estimates in much detail, but to be carefully made out so as to show the ultimate cost.

I am gentlemen, your obedient servant,
(Signed,) H. H. Killaly.

To Messrs. Stent & Laver.

EXHIBIT, No. 13.

OTTAWA, 29th May, 1861.

SIR,—Certain changes having been made in the position and duties of the clerks of works upon the Public Buildings at this place, I have to acquaint you that you are in future to take your orders directly and entirely from the Architects of the Parliament buildings, and to perform all such duties as they may think proper to assign to you, in reference to those buildings, and to those only.

It will be your duty to see that the orders of the architects are strictly carried into effect upon any portion of the buildings they may indicate; to set out the works from the plans whenever required by them; to see that none but the best class of materials are used, and that the workmanship throughout is well executed; to make measurements of all work performed; to keep the time of the men employed upon the works, both contract and extra, and such other memoranda in relation thereto as the architects may deem necessary and expedient.

A measurer, Mr. John Bowes, having been appointed to make all future measurements of the work performed on the Parliament buildings, and to furnish the architects with the details and results thereof for making up the progress and final estimates, a portion of which duty has heretofore been discharged by you, you are accordingly required to furnish him with all necessary explanations in relation to former returns, and to assist him in making out the future ones, in entering them into the books provided for this purpose, and in making copies thereof for transmission to the Department, in such manner and at such times as the architects may direct.

I have the honor to be, sir,
Your obedient servant,
SAMUEL KEEFER,
Deputy Commissioner Public Works.

Mr. John Grist, Clerk of Works,
Parliament Buildings, Ottawa.

EXHIBIT, No. 14.

PARLIAMENT BUILDINGS,
OTTAWA, 1st June, 1861.

We have received a letter from the Deputy Commissioner, bearing date the 29th May, 1861, enclosing a copy of a letter of instructions addressed to you.

In order to render your duties distinct and to avoid any mistakes in future, we have to request that you will take charge of that portion of the building tinted blue on the accompanying diagram.

Whenever your services are required by Mr. Bowes to assist him in measuring, you are to give notice to Mr. J. Larose, and he will take charge of your portion.

Your duties are very distinctly detailed by the Deputy Commissioner, especially as regards keeping authentic time lists for any additional works executed under our written orders.

You will please keep a daily diary of the progress, &c., of that portion of the work under your charge.

You are distinctly to understand that you will be held responsible for any mistakes or defective work of any kind.

We are, sir, your obedient servants,
FULLER & JONES,
Architects.

To Mr. John Grist,
Clerk of the Works, Ottawa.

EXHIBIT, No. 15.

MR. GRIST'S BOOK OF MEASUREMENT.

EXHIBIT, No. 16.

(Copy of 30,220. Sub. 1,029.)

QUEBEC, 30th December, 1859.

SIR,—I have the honor to send you with this, certain copies of Plans according to your memorandum, namely:

1st. A tracing of the attic story of Parliament Buildings.

2nd. Plot plans of the whole buildings, showing relative position to each other; also, shewing the difference of levels, and indicating the north.

With respect to the second, namely: A tracing of the attic story of the two Departmental Buildings, the Honorable the Commissioner regrets that he cannot supply it, as the originals are not in the office at this date.

No. 4 of the memorandum, viz.: Specification of the Departmental Buildings, is also enclosed.

(Signed,) J. G. VANSITTART,
For the Secretary.

Charles Garth, Esquire,
Montreal, C. E.

EXHIBIT, No. 17.

(Copy 30,634. Sub. 1,029.)

QUEBEC, 28th January 1861.

SIR,—I am directed by the Honorable the Commissioner to notify you that your first Tender for heating and ventilating the Parliamentary and Departmental Buildings, at Ottawa, by steam, on the vault system, for the bulk sum of sixty-one thousand two hundred and eighty-five dollars in conformity with the printed conditions submitted for competition, has been accepted by him with certain modifications, mentioned in the report of the Architects', and such others as upon maturing of the plans may be approved of by the Commissioner.

The modifications referred to by the architects are: 1st. Working the boilers at a higher pressure than 10 pounds to the square inch, as proposed by you; and 2ndly. Confining the vault system, in the Parliamentary buildings, to the library and central part, and applying steam radiators, joined with an approved system of ventilation, to the wings 3rd. That if, upon further investigation, it be found necessary for insuring success in the ventilation of the Parliamentary buildings that a fan be used, it shall be provided by you for that purpose, with an efficient engine to propel it.

I am further desired to request you to take your plans and proceed at once to Ottawa, and put yourself in communication with the architects of the buildings, respectively with a view of having them matured under their directions, and specification prepared, and everything so arranged between you and the architects, so that a contract can be entered into with this department which shall embrace the whole system of warming and ventilating in as complete a manner as their foresight can provide.

The plans and specifications are not to increase the amount of the tender and to be subject to the approval of the Commissioner.

(Signed,) T. TRUDEAU,
Secretary.

Charles Garth, Esq.,
Montreal, C. E.

EXHIBIT, No. 18.

(Schedule submitted by McGreevy, but not accepted.)

Parliament Buildings, Ottawa, Canada West.

MESSRS. FULLER & JONES, ARCHITECTS.

Schedule of fixed Rates and Prices for Labor and Material supplied on the ground and required in the erection of the new Parliament Buildings, City of Ottawa, forming the basis of the accompanying Estimate and Tender. The scale of rates here following to be allowed in valuing work for progress estimates, as well as for alterations, additions, or works dispensed with, and also for extras—to be measured and calculated solely by the Architects or the Clerk of Works.

	McGreevy's prices.	Changed to in pencil.
Excavator.		
1. Digging in earth, clay or gravel, and wheeling or levelling within 50 yds., per yard cube	$ 0 80	$ 0 21
2. Digging in rock, and wheeling or levelling within 50 yds., per yard, cube	2 50	0 53
3. Digging in earth, clay or gravel, and wheeling or levelling within 100 yds, per yard, cube	90	0 25
4. Digging in rock, and wheeling or levelling within 100 yds., per yard, cube	2 75	0 56
5. Digging within any part of the property, per yard, cube	3 50	Add 3c. on either.
6. Digging and re-filling for drains, not exceeding 5 feet deep, per yd., lineal	80	0 88
7. Digging and re-filling for drains, not exceeding 8 feet deep, per yd., lineal	1 00	1 22
8. Digging and re-filling for drains, not exceeding 12 feet deep, per yd., lineal	1 50	2 10
9. Laborer, per day	1 00	0 60
10. Cart, horse and driver, per day	1 75	1 50
11. Waggon, team and driver, per day	2 50	2 70
Mason and Bricklayer.		
12. Pit sand delivered, per yard, cube	0 65	0 42
13. River or drift sand delivered, per yard, cube	0 60	0 53
14. Common lime, per bushel	0 20	0 14
15. Water lime, per bushel	0 20	0 56
16. Common lime rubble mortar in the work, per toise	1 50	0 70
17. Do do brick do do per 1000	2 50	1 89
18. Water lime rubble do do per toise	1 50	2 00
19. Do do brick, per 1,000	2 50	2 45
20. Rough concrete, per yard, cube	6 00	1 58
21. First-class concrete, per yard, cube	6 50	2 60
22. Do do water lime, per yard, cube	6 50	3 15
23. Pugging of coarse mortar for floors, per square	1 50	0 42
24. Lime-stone for rubble, per toise of 54 feet	5 00	3 87
25. Rubble walling for foundations and backing, as per specification, per toise of 54 feet	6 00	3 50
26. Rubble in water lime, per toise of 54 feet	6 00	4 72
27. Facing rubble, as per specification, per yard, super	2 00	0 82
28. Bricks, common red, delivered, per 1,000	5 50	3 85
29. Do facing, per 1,000	10 00	4 37
30. Do chamfered for jambs and splays, per 1,000	16 00	4 90
31. Brickwork, common, in lime mortar, per 1,000	10 00	6 47
32. Do do in water lime, per 1,000	9 00	7 70
33. Rubbed or guaged arches, per foot, super.	0 20	0 35
34. Rubbed and guaged white brick in groins, per yard, super	3 00	1 75
35. Hollow molded bricks for groining of Library, per yard, super	4 50	0 87
36. Rubbed and guaged arches, edges chamfered, per yard, super	3 50	0 56
37. Tuck pointing in dark mortar for bricks, per yard, super	0 90	0 52
38. Pointing with dark mortar masonry, as per specification, per yd., sup.	1 50	0 09
39. Bricks on edge for back hearth, per yard, super.	1 25	0 87
40. Fire bricks, per 1,000	40 00	35 00
41. Brick arches, 9 in. per yard, super	1 80	0 68

Drains, exclusive of digging.	McGreevy's prices.	Changed to in pencil.
42. Stoneware pipes, as per specification, 4 inch, per yard, lineal	0 40	$0 42
43. Do do do 6 " "	0 50	0 73
44. Do do do 9 " "	1 00	1 05
45. Do do do 12 " "	1 65	1 26
46. Bricklayer, per day	1 50	1 48
47. Laborer, per day	1 00	0 78
48. Iron Cramps, per lb	0 08	0 09
49. Copper Cramps, per lb	0 50	0 53
Stone Cutter.		
50. Native sand stone, best quality, in blocks, delivered, per foot, cube	0 40	0 50
51. Ohio stone, best quality, per foot, cube	0 60	0 45
52. Perth stone, per foot, cube	0 25	0 28
53. Caen stone, best bed, per foot, cube		0 70
54. Arnprior marble, per foot, cube		1 05
55. Marble, per foot, cube		2 10
56. Other marbles, light color, per foot, cube		1 40

The following for Labor, cutting and fixing only, at per foot, super.

	Rough Bush Hammerd.		Fine Bush Hammered.		Rubbed.		Sunk.		Molded.		Chamfer	
	Changed to in pencil.	*	Changed to in pencil	*	Changed to in pencil.	*	Changed to in pencil.	*	Changed to in pencil	*	*	hanged to in pencil.
57. Native Sand Stone	$0.17	0.20	$0.23	0.30	$0.33	0 40	$0.56	0.50	$0.53	0.75	$0.50	0.40
58. Ohio	0 13	0.20	0 16	0 30	0.22	0.40	0.35	0.50	0.31	0.75	0.50	0.24
59. Perth	0.17	0.20	0.23	0 30	0.33	0.40	0.56	0.50	0.53	0.75	0.50	0 32
60. Caen	0.11	0·20	0.18	0.30	0.17	0.40	0.35	0.50	0.21	0.75	0.50	0.24

61. Arnprior Marble, polished per foot, super	$1 00	0 53
62. Marbles from Lower Canade, per " "	1 00	0 60
63. Other marbles, light, per foot super	1 00	0 60
64. 3-inch Ohio Stone for hearths, per foot, super	0 25	0 35
65. 3-inch Arnprior or other marble hearths, per foot, super	0 35	0 70
66. Fine bunched steps, Ohio stone, per foot, super	0 30	0 56
67. Do do Lime stone, per foot, super	0 30	0 67
68. Arnprior marble, do rubbed, " "	0 40	1 26
69. 4-inch Landings, Ohio stone, fine bunched, per foot, super	0 30	0 45
70. 4-inch do Arnprior marble, rubbed, pet foot, super	0 40	0 77
71. Stone-cutter, per day	1 60	1 57
72. Carver, per day	3 00	2 45

Carpenter and Joiner—Material delivered per 1,000 feet, B.M.

	1 in		1½ in.		2 in.		2½ in.		3 in.	
	Changed to in pencil	*	Changed to in pencil	*	Changed to in pencil	*	Changed to in pencil.	*	Changed to in pencil.	
73. Boards, Com. Yellow Pine	$ 8.40	10.00	$ 8.40	12.00	$ 7.70	14.00	$ 7.00	15.00	$15.00	7.00
74. " Clear " "	11.90	12.00	13.30	14 00	12.60	16.00	11.90	16.00	16.00	11 90
75. " Common Red Pine	9.10	10.00	9.10	12.00	8.40	14.00	8.05	15.00	15,00	8.05
76. " Clear " "	16.10	14.00	18.00	15.00	15.40	18 00	14.70	18.00	18.00	14.70

	1½ in.		2 in.	
	Changed to	*	*	Changed to
77. Flooring, Yellow Pine, 1st quality, perfectly clear	$16.10	14.00	$16.00	16.10
78. " " " 2nd "	13.30	12.00	14.00	13.30
79. " Red Pine 1st " perfectly clear	13.50	15.00	18.00	17.50
80. " " " 2nd "	14.00	12.00	14.00	14 00
81. " White Oak, 1st quality, perfectly clear	25.20	20.00	20.00	25.20

	*	Changed to
82. Commmon Scantling, yellow pine, per 1,000 feet, B.M.	$8 00	7 70
83. Clear " " " " "	10 00	11 90
84. Common " red pine, " "	10 00	8 40
85. Clear " " " " "	14 00	15 40
86. Oak in Scantling, per 1,000 feet, B.M.	18 00	25 20
87. Oak in boards or plank. per 1,000 feet, B.M.	18 00	25 20
88. Joisting as per Specification, yellow pine, per 1,000 feet, B.M.	8 00	9 80
89. " " " red pine, " "	10 00	11 90

* McGreevy's prices

Labor and Nails, materials included.	McGreevy's prices.	Changed to in pencil.
90. Framing concealed roofs, timber rough, per 1,000 feet, B.M.	4 00	20 30
91. " in open roofs, timber wrought, " "	4 00	35 00
92. " in floor joisting, per 1,000 feet, B.M.	3 00	15 40
93. " in ceiling joisting, per 1,000 feet, B.M.	3 00	15 40
94. " in quartered partitions, yellow pine, per foot run	0 10	0 02
95. " in quartered trussed yellow pine, per foot run	0 12	0 04
96. " trussed girders, per foot run	0 10	0 28
97. " in bond timbers, wall plates, &c., yellow pine, per foot run	0 02	0 03
Material and Labor and everything necessary to each item measured in the work.		
98. Centreing, per yard super	1 80	1 25
99. Bracketing and cradling for cornice, measuring cornice per ft., super,	0 08	0 11
100. Battening walls for lathing, per square	1 50	1 40
101. Sound boarding on fillets, per square	3 00	1 57
102. Roof boarding for slating, yellow pine, per square	3 00	2 45
103. Roof boarding for metal covering, per square	3 00	4 20
104. 1½-inch first quality flooring, yellow pine, per square	4 50	3 50
105. First quality flooring, white oak, per square	12 00	5 25
106. 2-in. doors, four panels, moulded, per foot, super	0 40	0 28
107. " " six " " " "	0 42	0 30
108. " " eight " " " "	0 44	0 35
109. 2¼-in. " four " " " "	0 50	0 53
110. " " six " " " "	0 50	0 60
111. " " eight " " " "	0 55	0 70
112. 12-in. Single faced moulded skirtings, per foot, run	0 05	0 17
113. 12-in. Double-faced " " " "	0 08	0 35
114. 18-in. Double-faced " " " "	0 11	0 56
115. Jamb linings, as per specification, per foot, super	0 10	0 25
116. Window sashes, fixed with all requisite frames, fastenings, weights, pullies, &c., per foot, super	0 20	0 35
117. Moulded casements, do, per foot, super	0 20	0 24
118. Oak match boarding, as per specification, per foot, super	0 10	0 09
119. Architraves moulded plain	0 06	0 13
120. Do do carved	0 25	0 18

Staircases.

	White Pine.		Red Pine.		Oak.	
	Changed to	*	Changed to	*	*	Changed to
121. 1½ treads, risers, molded strings, carriages, per step complete, as per specification, including hand-rail	$4.20	4.00	$4.90	4.50	$6.00	7.00
122. 2 in., " " " "	5.25	4.00	6.00	4.50	6.00	7.75
123. Carpenters, per day					1.25	1.50
124. Laborer, per day					1.00	0.76
125. Wood-Carver, per day					3.00	2.45

Tin Smith.	McGreevy's prices.	* Changed to
126. Step flashing in galvanized and tinned iron, per foot, super	$12 00	0 16
127. Hips and ridges " " "	12 00	0 19
128. Vallies " " "	12 00	0 16
129. Tin Smith, per day	1 25	1 50
130. Laborer, per day	1 00	0 80
Slater.		
131. Melbourne slates, laid as per specification, per square	9 00	6 70
132. Slater, per day	1 50	1 50
133. Laborer, per day	1 00	0 80
Smith and Founder.		
134. Ordinary castings, per cwt	4 00	3 15
135. Cast iron in girders, per cwt	6 00	2 80
136. Wrought iron in bars, bolts, straps, heads, shoes, nuts, screws, &c, per cwt	9 00	12 60

* McGreevy's prices.

cGreevy's prices.	Changed to in pencil.
4 00	20 30
4 00	35 00
3 00	15 40
3 00	15 40
0 10	0 02
0 12	0 04
0 10	0 28
0 02	0 03
1 80	1 25
0 08	0 11
1 50	1 40
3 00	1 57
3 00	2 45
3 00	4 20
4 50	3 50
12 00	5 25
0 40	0 28
0 42	0 30
0 44	0 35
0 50	0 53
0 50	0 60
0 55	0 70
0 05	0 17
0 08	0 35
0 11	0 56
0 10	0 25
0 20	0 35
0 20	0 24
0 10	0 09
0 06	0 13
0 25	0 18

Red Pine.		Oak.	
Changed to *		*	Changed to
$4.90	4.50	$6.00	7.00
6.00	4.50	6.00	7.75
		1.25	1.50
		1.00	0.76
		3.00	2.45

Greevy's prices.	* Changed to
$12 00	0 16
12 00	0 19
12 00	0 16
1 25	1 50
1 00	0 80
9 00	6 70
1 50	1 50
1 00	0 80
4 00	3 15
6 00	2 80
9 00	12 60

	McGreevy's prices.	Changed to in pencil.
137. Ornamental cast iron in railing, per cwt	10 00	5 60
138. Ditto wrought iron, "	13 40	17 50
139. " " " in vane, "	13 40	14 00
140. " " " in chain bond, "	13 40	7 00
145. " " " iron doors and frames, per cwt	15 00	12 60
146. " " " in Saddle bars and stancheons,	15 00	9 00
147. Wrought iron casements and frames	15 00	14 00
148. Hoop iron for bond delivered	10 00	5 00
149. Smith, per day	1 25	1 50
150. Laborer, per day	1 00	0 80
Plasterer.		
151. Lath and Plaster, 3 coats in Partitions, per yard, super	0 25	0 18
152 " " hard finish, " "	0 20	0 22
153. Plastering, 3 coats on walls, " "	0 20	0 15
154. " hard finish, " "	0 20	0 18
155. Lath and plaster ceilings, " "	0 30	0 19
156. Lime whiting, 2 coats, " "	0 05	0 03
157. Plain plaster mouldings, including mitres, per yard, super	0 25	0 16
158. Plasterer, per day	1 50	1 30
159. Laborer, per day	1 00	0 80
160. Portland Cement for Floors	0 50	9 56
Painting and Glazing.		
161. Size and Stain and Varnish, 2 coats, per yard, super	0 20	0 11
162. " " " 3 coats, " "	0 25	0 13
163. Knotting, Stopping, and Painting, 4 coats, per yard, super	0 20	0 14
164. Gilding, per inch	0 02	0 01
165. Finishing in Blue, per yard, super	0 10	0 15
166. Glazing 16 oz. Chances Sheet, per foot, super	0 10	0 14
167. " 21 oz. " " "	0 12	0 17
168. " 26 oz. " " "	0 15	0 21
169. " 30 oz. " " "	0 20	0 25
170. " 16 oz. " in lead quarrys, per foot, super	0 25	0 21
171. Painter, per day	1 25	1 50
172. Glazier, per day	1 25	1 50
Plumber.		
173. Milled Lead, per cwt	10 00	7 00
174. Cast Lead, per cwt	9 00	7 00
175. Medium Pipes	14 00	7 70
176. W. C. Apparatus, each	20 00	17 50
177. Wash Basins and Stands in Lavatories, each	8 00	5 00
178. Plumber, per day	2 00	1 75
179. Laborer, per day	1 00	0 80

All works not enumerated to be valued by the Architects.

EXHIBIT, No. 18½.

Schedule of fixed Rates and Prices for Labor and Material, supplied on the ground, and required in the erection of the New Departmental Buildings, City of Ottawa, forming the basis of the accompanying Estimate and Tender. The scale of Rates here following to be allowed for valuing works for progress estimates, as well as for alterations, additions or works dispensed with, together with Extras, to be measured and calculated solely by the Architects or Clerk of the works in charge, from time to time.

To Wit:	Contractor's prices.	Changed to in pencil.
Excavations involving all Pumping and disposal of Material.	$ cts.	$ cts.
In Earth, Clay, or Gravel, per Cubic Yard	80	21
In Rock.....do do	2 50	52
Drainage.		
Fire Clay Pipes with Cemented Joints, 14 23 35 42 52 Changed to 4 inch, 6 inch, 9 inch, 12 inch, 15 inch, diameter, per foot, run	1 50	
13 22 24 32 51 Changed to 4 " 6 " 9 " 12 " 15 " laid dry, do do	1 40	
Brick Barrel Drain in Mortar, 12 & 18 inch diameter. do do	2 00	45
Material.		
Arnprior Marble, unwrought, delivered, per Cubic Foot	1 05	
Ottawa Lime Stone do do do do	40	21
Ohio Sandstone, do do do do	60	45
Caen Freestone. do do do do		70
English Firebrick, unlaid, do per 1,000	40 00	35 00
Ohio or Malone Stone pavement Flagging, per foot superficial	30	25
Vermont and Eastern Townships Slating, laid with Copper Nails in the best manner, per square,	9 00	6 20
Minton's Eucarstic tiles, in plain colors, laid in the best manner, per foot super	20	77
Marble paving, white and black checkers, in the best manner, per foot super	1 00	60
Ashlar.		
Rubble Stone Masonry in lime mortar, in foundations, per cubic yard	3 00	1 58
do do in Cement do do do	4 00	2 59
do do in Mortar above ground level do do	3 50	1 75
Random Coursed Work do do do do do	4 00	2 53
Course Masonry, hammer dressed, do do	5 00	3 84
6 inch Ashler, per foot super	75	30
Rough bouchard face, per foot superficial	70	35
Fine bouchard do do do	90	38
Chiseled or Tooled face, per foot superficial, plain surfaces	1 00	42
Rubbed do do do	1 20	44
do for Moulded work do do	1 50	53
Concrete laid, per cubic yard	6 00	2 45
Brick Work.		
Interior Walls for Plastering, Laid in Mortar, per thousand, 20 bricks reckoned to the foot	10 00	6 30
Exterior Walls, Chimnies, &c, Laid in Mortar, do do	12 00	7 00
Brick work in Arches, Laid in Mortar, do do	16 00	6 65
Brick Paving on Edge, Laid in Mortar or Sand, do do	15 00	8 75
Brick Nigging Laid in Mortar, per 20 Bricks to the foot	15 00	7 00

lied on the ground, and
s, City of Ottawa, form-
The scale of Rates here
nates, as well as for al-
Extras, to be measured
s in charge, from time

Contractor's prices.	Changed to in pencil.
$ cts.	$ cts.
80	21
2 50	52
1 50	
1 40	
2 00	45
1 05	
40	21
60	45
	70
40 00	35 00
30	25
9 00	6 20
20	77
1 00	60
3 00	1 58
4 00	2 59
3 50	1 75
4 00	2 53
5 00	3 84
75	30
70	35
90	38
1 00	42
1 20	44
1 50	53
6 00	2 45
10 00	6 30
12 00	7 00
16 00	6 65
15 00	8 75
15 00	7 00

Lumber.	Contractor's prices.	Changed to in pencil.
White or Red Pine, Rough or Unframed, for Beams, Plates, Girders, Bresteumers, &c., per cubic foot	15	15
Cedars 12 in. diameter, per foot, lineal	06	12
Fixed.		
Pine Floor Joisting, B. M., per M	15 00	16
Studding or Quartering, B. M., do	15 00	17
Rafters, Purlins, &c., B. M., do	20 00	19
Bond Timbers, Wall Plates &c, B. M., per M	15 00	16
Trussed Partitions, per square	2 50	4 30
Herringbone Strutting, per hundred feet, run	2 00	7 00
Pugging, per squae, 3 inches thick	3 00	7 75
Battering Walls, etc., per square	1 50	40
Centreing, per square foot	20	07
Bracketing for Cornices and Projections, per foot, superl	08	10

Thickness.	2	Chang'd to	1½	Chang'd to	1	Chang'd to
First Quality Pine Battens, laid per square $	5 00	5 90	4 50	3 85	3 00	3 50
First Qualiiy Oak Battens, laid per square $	12 00	7 70	10 00	5 25	8 00	4 25
Second Quality Pine Battens, laid per square $	4 00	4 35	3 50	3 50	2 00	2 80
Second Quality Oak Battens, laid per square $	10 00	6 25	8 00	4 55	6 00	3 85
Pine Roofing boards, grooved and tongued laid per square $			1½		1¼	

	Contractor's prices.	Changed to in pencil.
Pine Roofing boards, grooved and tongued laid per square $	3 50	
Clear seasoned Lumber best quality, B.M. per M	14 00	13 30
Common Inch Boards, B. M., per M	12 00	8 40
Oak in Scantling, Planks or Boards, unfixed, per M, B.M.	30 00	25 20
Castings to Beams, Jamblings, etc., Dressed and Fixed, per lineal foot	08	35
Staff and Angle Beads, fixed	02	05
9 Inch Single Faced Moulded Skirtings Fixed, per foot run	05	14
12 Inch Double Faced do do do	08	21
16 Inch do do do do	10	28
do do in Keenes or Martins Cement	15	18
Including Frames, Hinges and Locks.		
2 Inch Four Pannelled Molded Framed Doors, of Pine and Oak, per foot super	40	
2 Inch Six Pannelled Moulded Framed Doors, of Pine and Oak per foot super	42	
Six Inch Single Faced Molded Door and Window Architraves, per foot lineal	05	08
Eight Inch Double Faced Molded Door and Window Architraves, per foot lineal	10	17
Ovolo Rising Sashes, Double Hinge, with all requisite Frames, Weights, Pullies and Fastenings, per foot superficial	20	35
Ovolo French Casements, Hinged and Fixed, per foot superficial	20	25
Plastering Work.		
Lath, plaster, Float and Set, per yard super	25	21
Render, Float and Set, do do.	20	18
Guage Work in Ceilings, Coves, &c., per yard super	30	24
Plastering Cornices, per foot girth	20	14
Centre Flowers fixed, per foot diameter	3 50	2 80
Lime White Basement Walls, per yard	05	03
Milled Lead Laid, per Cwt	10 00	7 00
Zinc Covering per pound	10	14
I. C. Tin Roof Covering, per square	2 00	10 50
Best Charcoal IX Covering, per square	12 00	12 00
Galvanized Iron Gutter, per pound	20	17

	Contractor's prices.	Changed to in pencil.
Ornamental Iron work per pound	12	17
Cast Iron Girders, per pound	05	03
Wrought Iron Straps, Bolts, etc., per pound	08	12
Cast Iron, per cwt	4 00	3 10
Cast Iron Gutters and Pipes per Cwt	4 00	3 50
Felt, Tar and Gravel on Roofs, per square	8 00	4 20
Painting.		
In White Lead, Oil, Knotting, Stopping and Priming	06	05
Two Coat work, per square yard	10	04
Three Coat do do do	15	07
Four do do do do	20	09
Add for Graining and twice Varnishing, per square yard	25	28
Distemper or Ceiling and Walls	06	07
Staining in Patent Asphaltum Stain,	10	09
Glazing, including Puttying in.		
Smethwick English Sheet, per foot super	10	35
Best English Crown do do	10	45
Seconds do do do	08	38
Best German Sheet	08	14
Ornamental or Coloured Glass, 10 per cent. allowed over Cost		
Gothic Lozenge Glazing in Metal Frames, per foot super	20	1 21
Carpenter's Wages per day	1 25	1 25
Joiner's do do	1 25	1 25
Bricklayer's do do	1 50	1 50
Stone Mason's do do	1 25	1 25
Stone Cutter's do do	1 60	1 60
Plasterer's do do	1 50	1 50
Labourer's do do	1 00	1 00
Slater's do do	1 50	1 50
Stone Carver's do do	3 00	2 50
Wood Carver's do do	2 50	2 50
Painter's & Glazier's do do	1 25	1 25
Plumber's do do	2 00	2 00
Tinner's do do	1 50	1 50
Blacksmith's do do	1 25	1 25

All Works not enumerated to be valued by the Architects, at fair Current Rates.

STENT & LAVER,
Architects, Ottawa.

October, 1859.

EXHIBIT, No. 19.

BOOK OF PRINTED FORMS OF SPECIFICATION WITH THE CONDITIONS WHICH HAD BEEN ERASED.

ontractor's prices.	Changed to in pencil.
12	17
05	03
08	12
4 00	3 10
4 00	3 50
8 00	4 20
06	05
10	04
15	07
20	09
25	28
06	07
10	09
10	35
10	45
08	38
08	14
20	1 21
1 25	1 25
1 25	1 25
1 50	1 50
1 25	1 25
1 60	1 60
1 50	1 50
1 00	1 00
1 50	1 50
3 00	2 50
2 50	2 50
1 25	1 25
2 00	2 00
1 50	1 50
1 25	1 25

nt Rates.

AVER,
hitects, Ottawa.

IONS WHICH HAD

EXHIBIT, No. 20.

SCHEDULE OF PRICES OF ARNPRIOR MARBLE.—1859.

	Price at the Quarry.	Delivered at Ottawa.
Marble in block, random sizes, at per foot, cube,.....	$1.00	$1.50
Sawn slabs, 5 inches thick, per foot supl.,.....	0.75	1.00
" " 4 " " " "	0.58	0.75
" " 3 " " " "	0.50	0.63
" " 2 " " " "	0.42	0.53
" " 1½ " " " "	0.37	0.43
" " 1¼ " " " "	0.35	0.40
" " 1 " " " "	0.32	0.37
" " ¾ " " " "	0.30	0.35

An extra charge will be made if the marble is required to given dimensions.

The above prices of delivery at Ottawa will be during sleighing season only. In summer the delivery will be somewhat higher.

WILLIAM KNOWLES.

EXHIBIT, No. 21.

PARLIAMENT BUILDINGS,
OTTAWA, 1st June, 1861.

SIR,—You will please take charge, as Clerk of the Works, of that portion of the Parliament buildings coloured yellow on the enclosed diagram.

As Mr. Grist's services will be required at times to assist with the measurements, you will also take charge of his portion of the works, (coloured blue on the enclosed diagram,) whenever he gives you notice that he will be engaged measuring.

We have to request that you will keep time lists for any additional works executed under our written orders; and that you will keep a daily diary of the progress, &c., of that portion of the works under your charge.

You are to distinctly understand that you will be held responsible for any mistakes or defective work of any kind.

We are, sir, your obedient servants,

FULLER & JONES,
Architects.

To Mr. J. Larose, Clerk of the Works,
Parliament Buildings, Ottawa.

EXHIBIT, No. 22.

(Copy No. 29,056. Sub. 1,025.)

QUEBEC, 9th Sept., 1859.

SIR,—I am directed by the Deputy Commissioner of Public Works to request you will proceed to Ottawa at your earliest convenience and make inquiries into the character of the materials available in that vicinity for the construction of the Public Buildings at Ottawa, which were advertised for tender yesterday (see advertisement attached,) particularly as to the adaptation of the limestone there for the rubble and dressed work of the walls. I have likewise to ask you to visit the nearest quarry of sandstone in the neighborhood that may be suitable for the dressed work of the external walls, and to report to this Department.

I am instructed to say that it will be well for you to call on Sir Wm. Logan, the Pro

vincial Geologist at Montreal, and to avail yourself of all the information he can give you on the subjects.

With a view to this I have the pleasure to enclose a note to Sir Wm., requesting him to facilitate your enquiries in every way in his power.

(Signed,) J. G. VANSITTART,
For Dep. Comm.

JOHN MORRIS, ESQ., Architect, Toronto.

EXHIBIT, No. 23.

(Copy No. 43,708.)

To the Honorable Commissioner of Public Works, Quebec.

SIR,—I have the honor to acknowledge the receipt of a letter of instruction from the Department of Public Works, dated 9th September inst., wherein I was requested "to go "to Ottawa and make enquiries into the character of the materials available in that vicinity "for the construction of the Public Buildings at Ottawa," and advised to call on Sir Wm. Logan, Montreal, and avail myself of all information he could give me on the subject.

In accordance therewith, I immediately proceeded to Montreal; but on calling at the Geological Museum, I was informed that Sir Wm. Logan had left town, and was not expected to return for some time. I was consequently deprived of the advantage of his high scientific knowledge. Finding it accordingly useless to wait in Montreal longer than sufficed for a careful examination of the various economic materials suitable to building purposes represented in the Geological Museum, I left Montreal and hastened to Ottawa, where I was fortunate in meeting with Alexander Murray, Esq., Assistant Geologist, from whom I gained such valuable information as in a great degree atoned for the loss sustained by the absence of Sir William Logan.

Having devoted several days to the examination of the various manufacturing lumber establishments, brick yards, and stone quarries, and also to such places as I was informed would afford other and better samples of limestone in that locality, I proceeded to the important marble quarries at Arnprior, and travelling by way of Perth, after an examination of the sandstone found there, I returned to Toronto on the 23rd instant.

SEASONED LUMBER.—The steady demand of the American Market, aided by the growing consumption of Ottawa and its immediate neighborhood has hitherto prevented any large stock of seasoned lumber remaining on hand, and the same causes still exist. There is, however, in the lumber yard of Mr. J. F. Vosburgh, near the little Chaudiere, about 400,000 feet of second class lumber, which has been culled over once: it is in thickness from 1 to 3 inches, two years seasoning, the price asked is $12 per thousand. There is also a small quantity of last winter's cutting at a saw mill on the Gatineau River which I did not visit.

It would appear therefore necessary that each contractor for carpenter's work should be bound by his contract to deposit on the building site a certain quantity of seasoned lumber, irrespective of the local supply, within one month from the time his tender is accepted. The quantity for the Parliament buildings should not be less than 300,000 feet, and for each of the Departmental Office Blocks not less than 200,000, and that the remainder of the lumber required in each case should be deposited within six months from the same time.

BRICKS.—The quantity of bricks hitherto made at Ottawa and the neighborhood has been very small. There are at present only three brickyards in operation. The total annual produce has never exceeded 2,000,000. The local demand has always proved a sufficient market, and including the bricks yet to be burnt this season there will not be more than 200,000 on hand of all sorts or not more than 140,000 of sound, well burnt bricks. They are rather small in size but of a fair average quality and quite good enough for all internal walls. The nearest brick yard is situated at the eastern end of the city, about one mile from the proposed building site, and is now in the occupation of Mr. Hiram Houghton, who has now 140,000 bricks of all sorts unsold. He anticipates that he will be able

to make 1,000,000 bricks next season. The present price asked is $6 per thousand, delivered in the city. The only other brick yard in which there are any unsold bricks, is situated near Hartnell locks on the Rideau Canal, about 3½ miles from the city. It is now in the occupation of Mr. John Singleton, who has about 80,000 good average bricks on sale; the price asked is $7 per thousand delivered in the city. This brickyard is very well situated, being on the bank of the canal, the land is held of the Government by Mr. Donald Kennedy; the Government possesses a large quantity of good brick clay, adjoining this brickyard.

As the total quantity of bricks that will be required in the whole of the proposed Government Buildings at Ottawa may be taken at 7,000,000 or 3,500,000 annually it is apparent, therefore, that even with the proposed increase in the manufacture of the next season the supply will fall very far short of the anticipated demand, for probably out of the total quantity made, there will not be more than 2,000,000 of first class bricks, (such as should be used in the Government works) turned out of the kilns, while it is not improbable that the general demand may require that quantity.

It would perhaps be well for the Government to take into consideration whether it will be better to grant to the contractors for the brick work in the several buildings, the privilege of making their own bricks on the land adjoining Singleton's brick yard on the Rideau Canal, charging a small rent perhaps for the land, which would not in my opinion be deteriorated for farming purposes by the removal of the clay. The canal would afford excellent accommodation for the transit of the bricks to the city. Should this course be adopted, I think that the effect would be at once apparent in the amount of the Tenders for the execution of the work.

Ottawa Limestone.—The Geological strata which underlies the City of Ottawa, and several miles of the adjacent country on every side, belong to the Black River and Trenton formations of the Lower Silurian group of rocks. There is therefore no want of good building stone; but from the great disturbance which has taken place in the strata between the Chaudiere Falls of the River Ottawa and the Falls of the Rideau into the Ottawa, the inferior beds only of those formations are found underlying the city. The stone of these beds is totally unfit for external walls, the upper beds being highly surcharged with nodules and seams of black bituminous shale, and the lower beds are charged with black chert and "crowded with fossils." Upon an examination of the earlier engineering and architectural works in Ottawa, which are chiefly built from these beds, it was found in every case that the stone was rapidly perishing, the shales decaying first, and the remainder being split into thin plates became fractured by the superimposed weight and fell away. The stone found in the building site and in the immediate neighbourhood of the city is only fit for common backing.

It thus became necessary to search for a better description of stone for the rubble and wrought work of the external walls. The first quarries that I visited were situated on each side of the Prescott road, in the township of Gloucester, about 3½ miles south of the city. They are in the occupation severally of Mr. Henry Roubillard, Mr. James Stephenson, and Mr. Halliday; the quality of the stone is much the same in all these quarries. The beds vary in thickness from 3 to 20 inches, but the thin beds prevail and are the best in quality. The two thick beds have a view about the middle of their thickness which I fear would in many cases turn out to be a positive bed, and they are, moreover, subject on the upper beds to nodules and seams of black shale. There are, however, occasional good blocks of large size obtained from these beds; the usual price is 1s. per cubic foot in the quarry; the cartage into Ottawa costs about 6d. per foot.

Finding that the thick beds of these quarries could not be depended upon, I next visited the Government quarries which are situated near the Hogsback locks, on the Rideau Canal, about five miles from the city, and found that a stone in thick beds and well adapted for the purpose in view could easily be obtained there. The stone, although somewhat coarse, is perfectly sound, and the beds uniform in thickness; this quarry will yield two beds, each about two feet thick, and one bed two feet eight inches thick; there are about 10 feet of soil to be removed before the thick beds could be reached, as the quarry is situated very near the canal, there would be water carriage from it to the building site.

I was subsequently informed that Wm. Scott, Esq., M. P. P. had commenced opening

a quarry in the rear of the village of Hull, at a distance of 2½ miles from the barrack hill. I therefore visited the spot and was pleased to find that the quality of the stone was superior to any I had yet seen. The stone lies near the surface in beds which vary from 10 inches to two feet in thickness, with one three-inch bed intervening; it is light coloured, fine in its granulation, and so far as I could see, entirely free from shale or fossils. Where it has been exposed, probably for ages, it exhibits no indication of decay; as none of this stone has yet been used in Ottawa, I could not ascertain the exact cost of it when delivered there. But as the distance from the building site is less, I believe that the cost would also be somewhat less than the stone from "Gloucester quarries" first mentioned. I have been informed that there are Geological indications of a good stone of the same description as the Hull stone, about three miles from Ottawa, on the Richmond Road, but there are no quarries opened.

I would therefore respectfully recommend the use of the stone of the "Gloucester quarries," and the thin bed of the Hull quarry for the facing Rubble. The stone of the Hull quary for all the wrought work and quoins, and the stone of the "Hog's Back quarry" for plinths and all special purposes where large sizes may be required.

Arnprior Marble.—This marble which has obtained such favorable notice at the recent exhibition at Kingston, is found in large quantities on the banks and islands of the Madawaska river, near the Village of Arnprior, in the County of Renfrew. The marble quarry now in operation is situated on an island, which is situated at the foot of the lumber slide at Arnprior. It is now in the occupation of Mr. J. Knowles. The marble is grey with wide dark veins in wavy lines, it is perfectly sound and can be obtained in large sizes. The cost delivered in Ottawa is about $1.50 per cubic foot, and if sawn into slabs varying from one to five inches in thickness, the cost would average 45 cents per superficial foot in Ottawa. The material is admirably adapted for bases, staircases, floors and pillars, and may be used with excellent effect for the pillars of the Legislative Chambers. It is too sombre for any large surface such as wall facing. For this latter purpose the white crystalised limestone of Fitzroy Harbour, and many other places in the Ottawa County would be much better adopted. The cost in Ottawa would probably be about the same as the Arnprior Marble.

Sandstone.—In the Geological Museum, Montreal, I found a specimen of sandstone got at Pembroke, on the Allumette lake. Judging from the block I thought that it appeared to be a good free and sound stone, but on further enquiry, and on examination of another sample of the same stone which I saw in the collection of Dr. Van Cortlandt, of Ottawa, I did not consider it worth while to visit the quarries. I was subsequently confirmed in this opinion by the remarks of Mr. Murray who says, "that the beds vary very much in colour which when a large quantity is required might be found objectionable, and moreover, the difficulty of transportation from thence to Ottawa would doubtless be very great." The stone contains fossils which would render it very difficult and expensive to work into mouldings. It however possesses many good qualities; the colour is light and pleasing in tone, and being of the Chagy formation it would doubtless be durable, and possibly some quantity of it might be secured on the lumber cribs and carried by them to Ottawa at small cost, but this uncertain mode of transit, coupled with the important items of cost and sufficiency of supply, led me to abandon for the present any further enquiry.

There are in many places in the Valley of the Ottawa, exposures, and in some places small quarries of hard Potsdam sandstone, a stratum which lies at the base of the lower Silurian group. It occurs in two most agreeably coloured and perfect forms near the mouth of the Gatineau river, about four miles from the Barrack Hill, and also appears in the townships of Ramsay, Packinham, and March. The colour is somewhat lighter, but it is in all these places equally hard. I examined one sample of the material which is used for quoins in a house in the village of Pakenham and found it extremely hard, but somewhat uncertain in colour. This description of rock is exceedingly durable, and is generally of a warm and pleasing colour, it is well adapted for quoins, archstones, weatherings and copings, and for other purposes where little labour is required, but its extreme hardness almost shuts it out from all ornamental uses, as the cost of working it would be nearly equal to that of working granite. I consider that the Gatineau rock is the best sample of the material and that it will afford the most reliable supply.

The next and most useful description of sandstone is the Calciferous sand rock of Perth, and Smith's Falls. The Perth quarry which I believe yields the best samples of stone, is situated about three miles from the town of Perth; the quarry will yield blocks of almost any workable size, but the stone requires careful selection. None of the buff or brown tint should be used in good work, the pale green tint characterises the best samples of stone, although it is not difficult to cut when newly quarried, yet it hardens rapidly and becomes very durable. It is well adapted to any purpose where carving is not required or very high finish, the tint would harmonize well with the Ottawa limestone.

The occupier of the best quarry now in operation is Mr. John Manion, the usual price delivered at Olivers ferry on the Canal, or at the Railway depot is 1s. per cubic foot, the cost delivered in Ottawa as near as I can ascertain is 2s. 3d. per foot. The rate of the cost of labour on it is about 120 per cent greater than that on Ohio stone. The material is well adapted for such external work as does not require carving or deeply sunk mouldings and it would be particularly useful for Cornice Strings and Arch Voussiors, but it is not adapted to fine internal work.

As to the result of the observations herein referred to, I would therefore respectfully recommend the use of Gatineau stone for plinth mouldings, buttresses, weatherings and copings. The Perth stone for string cornices, arches, and inner jambs, and Ohio or other equally good free sandstone for internal work and external carved work.

LIME AND SAND.—The abundence of both of these materials which are found almost on the spot in the greatest excellence renders it unnecessary to add any further remarks.

I have the honor to be, sir,
Your most obedient servant,
(Signed,) JOHN MORRIS.

Toronto, 4th October, 1859.

EXHIBIT, No. 24.

(No. 44,259.)

DEPARTMENTAL ORDER WITH REFERENCE TO TENDERS FOR PUBLIC BUILDINGS AT OTTAWA.

1st. Corresponding and Recording Clerks will both endorse each Tender as received at the office, marking the day and hour, but taking care that none of them are opened.

2nd. They will, at 12 o'clock on the 15th instant, begin to prepare a list of the several Tenders, and, as soon as finished, hand that list with the Tenders, to the Deputy Commissioner, who will verify and retain the same. They will also, after the delivery of the mails of the 15th instant, prepare a similar list of any further Tenders that may come in.

3rd. The Deputy Commissioner will himself convey the Tenders and list, to the Executive Council Chamber, and deliver the same to the Commissioner in presence of the other members of the Council.

4th. The Tenders will be opened by the Commissioner in Council, and be all verified and endorsed by him, after which they will be again delivered to the Deputy Commissioner who will also verify the same, and if possible prepare an abstract statement thereof at the time.

5th. If further calculations are necessary, the Deputy Commissioner will himself verify these calculations by actual inspection of the Tender, and he and the officer making the calculations will certify, on the back of each Tender the sum to which the same amounts, and also cause a properly certified schedule to be prepared with as little delay as possible to be submitted to the Commissioner and by him to be reported to the Council.

(Signed,) JOHN ROSE.

Quebec, 12th November, 1859.

EXHIBIT, No. 25.

DEPARTMENT OF PUBLIC WORKS,
QUEBEC, 17th Nov., 1859.

SIR,—I beg leave to submit, for your information, the following report upon the tenders received for the public buildings at Ottawa, up to noon of yesterday, and opened the same day in presence of His Excellency's Council.

In the 52 submissions thus received and opened, were contained, as will be seen by a reference to the accompanying schedules, 21 tenders for the Parliamentary and 29 for the Departmental Buildings. Two of these submissions, viz., Nos. 17 and 49, contained informal tenders; and to No. 47 I have the honor to direct your attention as being ambiguous.

The schedules give the names of the securities offered, and such other particulars as are necessary.

The seven lowest tenders for the Parliament Buildings, including fire-proofing, are as follows:—

1. Charles Peters, Quebec,	$346,000
2. Thomas McGreevy, Quebec,	361,900
3. David Glass, London	379,000
4. F. X. Berlinquet, Quebec,	399,810
5. Jones, Haycock & Co., Port Hope,	434,500
6. James Stewart & Co., Kingston,	450,000
7. John Gibson & Co., Toronto,	460,000
The architect's estimate is	$492,000

The lowest tenders for Departmental buildings, fire-proofing not being specified, are as follows:—

1. Charles Peters, Quebec,	$233,000
2. Brown and Watson, Montreal,	238,400
3. John Gibson & Co., Toronto,	249,000
4. Jones, Haycock & Co., Port Hope	251,000
5. F. X. Berlinquet, Quebec,	273,900
6. Thomas McGreevy, Quebec,	279,000
7. Alex. Manning & Co., Toronto,	290,000
The Architect's estimate is	$288,000

I have now to draw your attention to the fact, that the tender of Thomas McGreevy, No. 47, for the Parliamentary and Departmental buildings, taken together, corresponds exactly in amount with the sum of the two lowest tenders submitted by Mr. Charles Peters, viz., $579,000; but in reference to his tender, it does not appear whether fire-proofing is or is not included in it.

His Excellency's Council having decided upon the policy of rendering the Parliamentary buildings fire-proof, it may be fairly assumed they would sanction the adoption of the same principle for the Departmental; and in anticipation of such decision I have called upon the Architects for a specification and estimate for rendering them fire-proof, which they were at first afraid to give, on account of the increased expense, but have since estimated at $43,918.

I beg to add, that since noon of yesterday, nine more tenders have been received for these buildings, but they remain unopened.

I have the honor to be, sir your obedient servant,
SAMUEL KEEFER,
Deputy Commissioner.

EXHIBIT, No. 26.

(Copy.)

DEPARTMENT OF PUBLIC WORKS,
Quebec, 17th Nov., 1859.

SIR,—In compliance with your request, I called upon Mr. Thomas McGreevy to state whether, in his ambiguous tender (No. 47) for Parliamentary and Departmental Buildings at Ottawa, in one bulk sum of $579,000 for both; he included the fire-proofing of the former. I now beg to submit his reply in writing, that the *fire-proofing is included.*

His tender, No. 48, for the Parliamentary Buildings is	$317,000
And he adds for fire-proofing	44,900
Total	$361,900
And his tender, No. 46, for the Departmental Buildings is	$279,600
Total of the separate tenders (Nos. 48 and 56)	$640,000
Amount of the tender, 47	579,000
Difference	$ 61,900

which is the discount taken off the aggregate of his separate tenders, for the sake of obtaining the whole of the work.

I deem it my duty to draw your attention to the fact that Mr. McGreevy has not submitted any schedule of prices, which are indispensable in case of entering into a contract.

With reference to the securities, I beg to observe that from the enquiries I have yet made, I am unable to express any decided opinion.

I have the honor to be, sir,
Your obedient servant,
(Signed) SAMUEL KEEFER,
Dep. Commissioner.

Hon. John Rose,
Com. of Public Works, Quebec.

EXHIBIT, No. 27.

QUEBEC, November 16th, 1859.

SIR,—With reference to my "Tender for the erection of the Parliament and Departmental Buildings at the City of Ottawa," the tender submitted by me in block sum, included fire-proofing.

I have the honor to be, Sir, your most obedient servant,
(Signed) THOS. MCGREEVY.

To Hon. Commissioner of Public Works.

EXHIBIT, No. 28.

(Copy.)

DEPARTMENT OF PUBLIC WORKS,
Quebec, 17th November, 1859.

The Commissioner of Public Works has the honor to submit herewith the schedules of the Tenders for the erection of the Buildings at Ottawa, together with the report of the Deputy Commissioner on the tenders.

It will be seen that the lowest separate tenders are those of Charles Peters. The tender of Thomas McGreevy for the whole being ambiguous, the Commissioner directed enquiry to be made whether it included the fire-proofing; and the reply of Mr. McGreevy in the affirmative, is herewith submitted, together with the report of the Deputy Commis-

sioners. If McGreevy's offer (No. 47,) is received as a tender for the erection of the Parliamentary and Departmental buildings, then the tenders of McGreevy and Peters' are equal in amount; those of Peters' being the lowest, if taken separately.

The undersigned coincides in the recommendation of the Deputy Commissioner as to having the Departmental buildings made fire-proof.

The Commissioner does not feel warranted either in formally rejecting or entertaining the tender (No. 47,) of Mr. McGreevy; but submits the point for Your Excellency's decision as well as the question of determining which of all the tenders shall be accepted.

The undersigned is not prepared to offer any opinion regarding the sufficiency of any of the securities offered by Messrs. McGreevy and Peters.

(Signed,) JOHN ROSE,
Commissioner.

EXHIBIT, No. 29.

(Copy of No. 29,833.)

Quebec, 24th Novembr, 1859.

SIR,—I am instructed by the Hon. Commissioner to inform you, that your single tender of five hundred and seventy-nine thousand dollars, for the erection of the Parliamentary and Departmental buildings at Ottawa, including the fire-proofing of the former, in accordance with the plans, specifications and conditions submitted to public competition, will be accepted by this Department for the whole work, on your complying with the following conditions

1st. That you submit the names of two sureties acceptable to the Commissioner.

2nd. That you prepare and submit schedules of prices to the satisfaction of the Department.

3rd. That in as much as the Government had decided upon having the departmental building made fire-proof also, and the cost thereof is estimated by this department to be forty-three thousand nine hundred and eighteen dollars, you agree to accept this estimate in addition to your tender, and perform the work to the satisfaction of this Department, making a total sum of six hundred and twenty-two thousand nine hundred and eighteen dollars for the whole of the work including the fire-proofing of all the buildings as specified. An early answer is requested.

J. G. VANSITTART,
for the Commissioner.

Thomas McGreevy, Esq., Quebec.

EXHIBIT, No. 30.

No, 44,233. QUEBEC, November 29th, 1859.

SIR,—In reply to your letter of the 24th instant, awarding me the contract for the erection of the Parliament and Departmental Buildings at Ottawa on the three conditions mentioned in your letter,

1st. I submit the names of Messrs. L. Stafford and John Flanagan as my securities.

2nd. I have already submitted the schedule of prices.

3rd. The fire-proofing of Departmental Buildings will cost fifty thousand four hundred dollars.

I have the honor to be, sir,
Your most obedient servant,
(Signed,) THOS. R. MCGREEVY.

To the Honorable the Commissioner of Public Works.

No. 44,235.

QUEBEC, November 30th, 1859.

SIR,—With reference to the third clause respecting fire-proofing of the Departmental Buildings at Ottawa; in reconsidering the amount of the estimate, I would accept an addition of ten per cent on the amount of the estimate of your Department.

I have the honor to be, sir,
Your most obedient servant,
(Signed,) THOS. R. MCGREEVY.

To the Honorable the Comm'r. of Public Works.

No. 1,925.

DEPARTMENT OF PUBLIC WORKS,
QUEBEC, 30th Nov., 1859.

To His Excellency the Right Honorable SIR EDMUND WALKER HEAD, Baronet, Governor General, &c., &c., &c.

The undersigned has the honor to report for the information of Your Excellency, with reference to the amount to be added to the contract for fire-proofing the Departmental Buildings at Ottawa, that the cost was estimated by the Department of Public Works at $43,918, which the Contractor considered too low by $6,482. That to cover the possible difference, the Deputy Commissioner and architects consider that ten per cent may be added to their estimate, and the Contractor is willing to accept that sum, making in all $48,310 for the fire-proofing. The undersigned concurs in the recommendation and the authority to insert the sum of $48,310, as the price to be allowed to the Contractor for fire-proofing the Departmental Buildings,

Respectfully submitted,
(Signed,) JOHN ROSE,
Commissioner of Public Works.

No. 1,928.

Copy of a Report of a Committee of the Honorable the Executive Council, approved by His Excellency the Governor General in Council, on the 2nd December, 1859.

On the Report of the Honorable the Commissioner of Public Works, dated 30th November, 1859, stating that with reference to the amount to be added to the contract for fire-proofing the Departmental Buildings at Ottawa, the cost was estimated by the Department of Public Works at $43,918, which the Contractor considered too low by $6,482; that to cover the possible difference, the Deputy Commissioner and the Architects consider that ten per cent may be added to their estimate, and the Contractor is willing to accept that sum, making in all $48,310 for the fire-proofing.

The Commissioner concurs in the recommendation, and requests authority to insert the sum of $48,310, as the price to be allowed the Contractor for fire-proofing the Departmental Buildings.

The Committee advise that the authority requested be granted.

Certified,
(Signed,) WM. H. LEE, C. E. C.

EXHIBIT, No. 31.

PRINTED FORM OF CONTRACT.

ARTICLES OF AGREEMENT entered into on the day of in the year of Our Lord, one thousand eight hundred and and made in Duplicate, BETWEEN

of the first part, and Her Majesty Queen Victoria, represented herein by the Commissioners of Public Works of the Province of Canada, of the second part: Witness, that the part of the first part hereby bind and oblige heirs and assigns, to and in favor of Her said Majesty, Her Heirs and Successors, for and in consideration of the covenants, conditions and agreements hereinafter mentioned, to find all necessary tools, implements and materials whatsoever, and to construct, complete and finish, in every respect, to the satisfaction of the Commissioners, all the

in a good, substantial, and Workmanlike manner,

The whole to be completed and finished and to be in every respect ready for use, on or before the

IN CONSIDERATION WHEREOF, Her Majesty Queen Victoria, represented by the said Commissioners as aforesaid, doth hereby promise and agree to pay to the part of the first part, or to the heirs, assigns, or legal representatives of the part of the first part, the rates and prices hereinafter mentioned, viz:

which aforesaid sums are all computed in Currency, and payment thereof will be made by Her said Majesty according to the provisions of Statute 9 Victoria, Chapter, 37, Section 35.

And the said part of the first part, and Her said Majesty, represented as aforesaid, do hereby declare, covenant and agree that the said contract and undertaking shall be and is further made and entered into by them, the said part of the first part and Her said Majesty, represented as aforesaid, under the express agreements, stipulations, covenants and conditions following, that is to say:—

Firstly.—That payments of the price hereinbefore mentioned, shall be made to the part of the first part within ten days after an estimate of the Engineer or Officer in charge shall have been received by the Commissioners, specifying the amount of work done during the month then ending; but that nevertheless, it shall be lawful for Her Majesty to withhold from the part of the first part and retain per cent, out of the amount of the estimates until the perfect completion of the work, and the acceptance of the same by the Commissioners, which per cent, so withheld and retained, shall be paid with the last instalment, within ten days after the Engineer or Officer in charge shall have delivered to the Commissioners his final estimate of the work performed, and the materials furnished, in virtue of these presents, with detailed measurements, weights, &c., and his certificate of the work having been fully completed and finished, if the Commissioners shall so soon have accepted and approved of the work; and that in forming his final estimate, the Engineer or other Officer shall not be bound or governed by the preceding monthly estimates, which shall be taken and considered merely as approximate. Provided always, and it is further agreed, that Her said Majesty, from time to time during the progress of the works, may pay to the part of the first part the whole or any portion of the per cent, so withheld and retained.

Secondly.—That if, by the report of the Engineer or superintendent employed by the Commissioners in that behalf, it shall appear that the establishment and rate of progress at and in the said works, are not such as to ensure the completion of the same within the time herein prescribed, or if the part of the first part shall persist in any course, violating the provisions of this contract, Her said Majesty shall have the power, at Her discretion, by the Commissioners aforesaid, or their successors in Office, without previous notice or protest, and without process or suit at law, either to take the work, or any part thereof, out of the hands of the part of the first part, and to relet the same to any other Contractor

or Contractors without its being previously advertised, or to employ additional workmen and provide materials, tools and other necessary things at the expense of the part o the first part; and the part of the first part in either case shall be liable for all damages, and extra costs and expenditure, which may be incurred by reason thereof; and shall in either of such cases likewise forfeit all moneys then due, under the conditions and stipulations, of any or either of them herein contained.

Thirdly.—That in case of failure in the contract, the part of the first part shall thereby forfeit all right and claim to the said per cent, or any part thereof remaining unpaid, as well as to any moneys whatever due on this contract.

Fourthly.—That all materials for the said work shall be inspected and approved of, before being used, either by the Commissioners or such person as they may appoint, and any materials disapproved of shall not be used in the work, and if not removed by the part of the first part, when directed by the Commissioners or their Engineer or person in charge, then, the rejected materials shall be removed by the Commissioners, their Engineer or person in charge, to such place as they may deem proper, at the cost and charge and at the risk of the part of the first part, but it is distinctly understood and agreed, that the inspection and approval of materials, shall not in any wise subject Her said Majesty to pay for the said materials, or any portion thereof, unless employed or used in the said works, nor prevent the rejection, afterwards, of any portion thereof, which may turn out to be unsound or unfit to be used in the work, nor shall such inspection be considered as any waiver of objection to the work on the account of the unsoundness or imperfection of the materials used.

Fifthly.—That it shall be in the power of Her said Majesty to make payments or advances on materials, implements, vessels or tools of any description procured for the works, or used, or intended to be used, about the same, in such cases and upon such terms and conditions, as to the said Commissioners may seem proper; and that whenever any advance or payment shall be made to the part of the first part, upon any tools, implements or materials of any description, the tools, implements or materials upon which such advance or payment shall be made, shall thenceforward be vested in and held as collateral security by Her Majesty, Her Heirs and Successors, for the due fulfilment by the part of the first part of the present contract; it being however well understood that all such tools, implements or materials of any kind, are to remain at the risk of the part of the first part, who shall be responsible for the same, until finally used and accepted as part of the work by the Commissioners; but the part of the first part shall not presume to exercise any act of ownership or control whatever over any tools, implements or materials upon which any advance or payment shall have been so made, without the permission in writing of the Commissioners.

Sixthly.—That should any overseer, mechanic or workman employed on or about the work, give any just cause of complaint, the part of the first part shall, immediately upon the application of the Commissioners, their Engineer or person in charge, dismiss such person or persons forthwith from the works, and he shall not be employed again thereon, without the consent of the Commissioners; and should the part of the first part continue to employ such overseer, mechanic or workman, the part of the first part shall forfeit to Her Majesty, Her Heirs and Successors, the sum of five pounds, current money aforesaid, for each and every day during which such overseer, mechanic or workman shall be employed on the works, after such application as aforesaid; and all sums so forfeited, shall be deducted from and out of the amount which the part of the first part may be entitled to receive from Her said Majesty, at the commencement of the month next ensuing such forfeit, or at a later period, as Her Majesty shall deem proper.

Seventhly.—That if any change or alteration, either in the position or details of any part of the work, shall be required, by the said Commissioners during the progress thereof, the part of the first part is hereby bound to make such alteration or change, and if alterations or change shall entail extra expense on the said part of the first part, either in labour or materials, the same shall be allowed to the said part of the first part, or, should it be a saving to the said part of the first part, in either labour or materials, the same shall be deducted from the amount of this contract; in either case, the amount is to be determined by the estimate made by the Commissioners, their Engineer or Officer in charge. But no such change or alteration, whatever may be the extent or

quality thereof, or at whatever time the same may be required to be made, pending the said contract, shall in any wise have the effect of suspending, superseding, annulling or rescinding this contract, which shall continue to subsist, notwithstanding any such change or alteration; and every such change or alteration shall be performed and made by the said part of the first part, under and subject to the conditions, stipulations and covenants herein expressed, as if such change or alteration had been expressed and specified in the terms of this contract; and should the said part of the first part be required by Her Majesty, represented as aforesaid, to do any work, or furnish any materials for which there is not any price specified in this contract, the same shall be paid for at the estimated prices of the Engineer in charge of the works; but no change or alteration as aforesaid whatever, and no extra work whatever, shall be done without the written authority of the Engineer in charge, given prior to the execution of such work, nor will any allowance or payment whatever be made for the same, in case it should be done without such authority.

Eightly.—That the part of the first part shall not in any way dispose of, sublet, or relet any portion of the work embraced in this contract, except the procuring of materials.

Ninthly.—Should any difference of opinion arise as to the construction to be put upon any part of the specifications or plans, the same shall be determined by the Commissioners alone, and such determination shall be final and conclusive, and binding upon the parties to this contract, and every of them.

Tenthly.—That any notice or other paper connected with these presents, which may be required or desired, on behalf of Her Majesty, to be served on the part of the first part, may be addressed to the part of the first part, at his or their domicile or usual place of business, or at the place where the work hereby contracted for is to be carried on, and left at the Post Office, and any paper so addressed and left at the Post Office, shall, to all intents and purposes, be considered legally served.

Eleventhly.—That should the part of the first part not complete the work herein contracted for, at the period agreed upon as above mentioned, the said part of the first part shall be liable for, and shall cause to be paid to the part of the second part, all salaries or wages which shall become due to the person or persons superintending the work, on behalf of the said Commissioners from the above named period for completion, until the same shall actually be completed and received.

Twelfthly.—That should the amount now voted for this service by the Legislature, be at any time expended previous to the completion of the work now contracted for, the said part of the first part may, or not, as may be seen fit, on receiving a notice in writing from the said party of the second part, to the above effect, stop the work; but in any case, the part of the first part, shall not be entitled to any further payment for work done, after the service of the notice above referred to, until the necessary Funds shall have been voted by the Legislature; nor shall the said part of the first part have any claim for compensation or damages for the said suspension of payment.

In Witness Whereof, the part of the First Part, and the said Commissioners representing Her Majesty as aforesaid, have hereunto Signed their Names and set their Seals, and the Secretary for the said Public Works hath also Countersigned these Presents.

Signed and Sealed by the said part of the first part, in presence of

Signed and Sealed by the said Commissioners of Public Works, and Countersigned by the Secretary in presence of

EXHIBIT, No. 32.

(Copy of 32,709. Sub. 1027.)

DEPARTMENT OF PUBLIC WORKS,
QUEBEC, 26th June, 1860.

GENTLEMEN,—I am directed to inform you in relation to the Supplementary Estimate for May last, of works done on the Departmental Buildings at Ottawa, that the payment of it is delayed and postponed until you have explained the reason for the additional prices put upon extra work, beyond those of the previous estimates, as well as the reason for the very high rate at which some of the new work has been returned, as for instance "Extra labor, arches, cold air ducts, 169 ft. at $2.50 per Supl. ft. $422.50" and "extra labor, face work of smoke flue arches in boiler house, 82 feet at $1.80 per foot, $147.60.

I have, therefore, to request you to furnish the Honorable Commissioner with the information and explanation he desires on the several items contained in the said supplementary estimate.

I have the honor to be, gentlemen,
Your obedient servant,
(Signed,) T. TRUDUAU,
Secretary.

Messrs. Stent & Laver,
Architects, Ottawa.

EXHIBIT, No. 33.

(Copy of 32,922. Sub. 1027.)

QUEBEC, 11th July, 1860.

GENTLEMEN,—I am directed by the Hon. Commissioner to inform you that a certificate has been issued for the sum of $11,830.51, in payment of the supplementary estimate, for May instead of 12,906.51 as returned in progress estimate dated June 16, 1860.

The Deputy Commissioner has deducted half the allowance on the following items, viz:

Extra labor face work of smoke flue arches in boiler house 82 feet at $1.80—$147.60.

Extra labor arches, cold air ducts, 169 supl. feet at $2.50—$422.50.

Cut stone prepared invert arch stone for drains, 990 feet at $1.20—$1881.00.

I am directed to state that these deductions have been made by the Deputy Commissioner because he cannot approve of prices which range from $46.60 to $67.50 per cubic yard. It is possible that such prices are not embraced in the estimate; but from the manner in which it is made it would appear so.

If this work can be returned by the cubic yard or toise, he will be better able to judge of the prices.

He desires that the contractors shall be paid fair prices, but feels he would not be justified in giving his approval to any that apparently so far exceed what is just or reasonable.

(Signed,) T. TRUDEAU,
Secretary.

Messrs. Stent & Laver,
Architects, Ottawa.

EXHIBIT, No. 34.

(See original for date.) Say June 30, 1860.

The Secretary, Department of Public Works.

SIR,—We beg to acknowledge the receipt of your letter of the 26th inst., No. 32709 subject 1027, and the supplementary estimates enclosed.

For the information of the Hon. the Commissioner, and in explanation of the prices referred to in your letter, viz: upon extra labor arches of cold air ducts, " and extra labor face work, of smoke flue arches in boiler house; we beg to state that the cause of the difference in the price is the additional rate of wages given since the strike.

The arches in the boiler house having been worked a long time previous to that event though not set, an additional reason is, the nature of the work upon the arches, which have been cut with great precision and care to meet their requirements; the third and principal reason which makes the price appear high is in the mode of measurement adopted, which is necessary only in the external faces of the work, and not the beds and joints; if this latter practice, which is the general custom in all large works, was adopted, the area would be more than doubled, and though the price would be less, the gross amount would be greater, as all such work being sunk or circular, is invariably put at double that of plain surface work of the same kind, and is the basis of our calculation in the present instance, on partial measure. There are no additional arches in connexion with smoke flues of this kind, the other being priced at 40 cents; there still remain about 12 to be built over the cold air duct which will require great care in construction.

There are other portions of extra work upon which the prices are put low, and which from their nature will not bear even their actual value; such for instance is the extra labor face work of cold air ducts for which the contractors required the same as the boiler house, viz: 90 cents per foot, and which is of almost equal quality, but from the circumstances we did not feel justified in allowing higher price than that named, 37 cents; the same also of the arches priced at 40 cents.

In reference to the additional prices put upon extra work, beyond those of the previous estimates to which you call our attention, we beg to refer you to our letter 19th April, accompanying the estimate for March, in which the same apparent discrepancy occurs on excavating drain below 10 feet in left hand building, the only item on which a difference occurs. The peculiar formation of the rock is such that it is impossible to make progress with the excavation, and equally difficult to arrive at a correct value of the work done; we are satisfied that the estimate sent is below the cost, some portions yet to be excavated will greatly exceed the price named, $5 per yard, and we beg further to state in reference to this particular portion of the work, that we have given instructions to the clerk of the Works to keep an accurate account of the labor expended to enable us at completion to ascertain the actual outlay, and allow a fair profit upon the same for the contractors. The prices in question were left open till Mr. Stent's return from Quebec, in order to determine them in Council with the other architects and clerks of works as submitted to the Hon. Commissioner, and approved by him on a former occasion.

Waiting your further instructions in reference to the estimates returned to us, and trusting the explanation given will be satisfactory to the Commissioner,

We have the honor to be, sir,

Your obedient servant,

(Signed,) STENT & LAVER.

EXHIBIT, No. 35.

(Copy 48,144.)

OTTAWA, July 14, 1860.

SIR,—Herewith we beg to forward you duplicate copies of the estimate for June, in connection with the Departmental Buildings.

We received your favor of the 11th inst., referring to three items in the estimate for May, the price of which the Deputy Commissioner had reduced viz: " Extra labor face work of smoke flue arches in Boiler House;" " Do. do. cold air ducts;" " Cut stone invert arches for drains."

We have in the present estimates retained the prices to avoid altering and making

erasures, and will charge the contractors with the deductions in the next estimate, in connection with extensive deductions upon stone and other materials previously returned as "prepared" but not set.

The amount of work executed in June under the items referred to, is excluded from this estimate as also the deductions mentioned above, each of which can form a supplementary estimate which Mr. Stent will submit to the Deputy Commissioner, duringh is visit to Quebec, which will be in a few days.

We have the honor to remain, sir,

Your very obedient servants,

(Signed,) STENT & LAVER.

T. Trudeau, Esq,

Secretary, Department of Public Works.

EXHIBIT,

THOMAS MCGREEVY, Esq., Contractor for Parliament Buildings, Ottawa, in DR.

Date of Payment.	Particulars of Payments.	Number of Certificate.	Amount of each Payment.	
			$ cts.	$ cts.
1860.				
February 9...	To certificate in payment of Estimates, January 7, 1860...	5554	1737 77	
March 12...	To " " " Feby., " ...	5677	4429 20	
April 26...	To " " " March, " ...	5860	5034 61	
May 16...	To " " " April, " ...	5951	10445 0	
June 20...	To " " " May, " ...	6118	15855 14	
July 19...	To " " " June, " ...	6292	33269 99	
August 7...	To " " " July, " ...	6416	29315 81	
Septr. 8...	To " " of portion of drawback " ...	6513	11000 0	
" 17...	To " on acc't of Estimate for Aug. & Sept. " ...	6538	35000 0	
October 31...	To " " " " ...	6787	20000 0	
Novr. 16...	To " in full " " ...	6885	12675 15	
" 19...	To " on account " " ...	6896	20000 0	
				198762 56
				198762 56
1861.				
January 1...	To balance brought down.....	.....	20000 0	
February 2...	To certificate on account of corrected estimates, Feby. 1861...	7174	9000 0	
March 16...	To " in full " " ...	7301	8289 12	
April 17...	To " in payment of estimates, Feby. & Mach, " ...	7406	15194 1	
May 17...	To " " April, and accounts, " ...	7514	16918 26	
				69401 39
				69401 39
June 13...	To certificate for Order in Council, June 13, 1861.....	7601	30000 0	
" 18...	To " on account of May Estimate, "	7610	10000 0	
" 25...	To " " June " "	7625	15000 0	
July 31...	To " " July " "	7746	25000 0	
August 26...	To " " August " "	7855	20000 0	
Septr. 11...	To " advance on account, "	7917	40000 0	
October, 8...	To " " " "	7999	40000 0	
" 19...	To " " " "	8085	10000 0	
Novr. 20...	To " " " "	8192	45000 0	
			235000 0	
1862.				
January 1...	To balance	.....	$140290 68	

EXHIBIT,

ldings, Ottawa, in

Amount of each Payment.	
$ cts.	$ cts.
1737 77	
4429 20	
5034 61	
10445 0	
15855 14	
33269 99	
29315 81	
11000 0	
35000 0	
20000 0	
12675 15	
20000 0	
	198762 56
	198762 56
20000 0	
9000 0	
8289 12	
15194 1	
16918 26	
	69401 39
	69401 39
30000 0	
10000 0	
15000 0	
25000 0	
20000 0	
40000 0	
40000 0	
10000 0	
45000 0	
235000 0	
$140290 68	

No. 36.

account current with Department of Public Works.

Cr.

When Received.	Particulars of Estimates Credited.	Amount.	
		$ cts.	$ cts.
1860.			
February 6...	By Estimates for January 1860	1737 77	
March 9...	By " February, "	4429 20	
April 23...	By " March, "	5034 51	
May 16...	By " April, "	10464 80	
June 16...	By " May, "	15835 34	
July 19...	By " June, "	33269 98	
August 6...	By " July, "	29315 81	
	By a portion of drawback allowed	1100 0	
Novr. 13...	By Estimate for August and September, 1860	67675 15	
			178762 56
	By Balance		20000 0
Decr. 17...	By Estimate for October and November, not approved		
1861.			
January 30...	By " for December and January, 1861, "		
			198762 56
March 6...	By Estimate corrected to 1st February, 1861	37289 12	
April 13...	By " for March, $15274 71		
	less accounts B. 5, 6 & 7, 80 70	15194 01	
May 15...	By " for April 17542 41		
	less accounts, A. 17, B. 6, C, 6 & 7, 624 15	16918 26	
			69401 39
			69401 39
June 22...	By Estimate for May, 1861	12264 43	
July 18...	" June, "	25196 36	
August 9...	" July, "	18677 77	
Septr. 7...	" Augt., "	37946 61	
	By accounts deducted in April	624 15	
	By balance	140290 68	
		235000 0	

EXHIBIT,

Messrs. JONES, HAYCOCK & Co., Contractors for the Departmental Buildings,

DR.

Dates of Payment.		Particulars.	Number of Certificate.	Amount.
				$ cts.
1860.				
Feby.	13...	To Certificate for Estimate for January, 1860	5576	2264 07
March	19...	" " February, "	5704	3885 12
April	26...	" " March, "	5861	10350 22
May	10...	" " April, "	5939	5718 95
June	12...	" " May, "	6088	24149 85
July	11...	" " supplementary for May, 1860	6260	11830 51
"	14...	" Advance to be repaid monthly	6276	5000 0
"	18...	" Estimate for June, 1860	6288	32009 55
August	23...	" " July, "	6442	32233 96
October	2...	" Advance on account for August and Sept., 1860	6564	20000 0
Novr.	13...	" Estimate for " " "	6870	10313 65
"	23...	" Estimate for October " "	6904	37705 82
"	30...	" Supplementary Estimate for May, "	6914	1076 0
Decr.	11...	" Advance on account	6970	8000 0
				204548 60
1861.				
Jany.	1...	To balance brought down	.....	8000 0
"	15...	Certificate for Advance on account	7133	16000 0
March	11...	" Corrected Estimate for 28th February, 1861	7287	18360 39
April	17...	" Estimate for March, 1861	7405	13920 38
May	15...	" " April, "	7506	21424 43
"	26...	" this amount short, paid in April, 1861	7521	1269 75
				78974 95
June	13...	To Balance overpaid brought down	.....	126 97
"	13...	Certificate Order in Council, 13th June, 1861	7600	30000 0
"	20...	" for Estimate for May, "	7620	26175 86
July	5...	" on account of Estimate for June, "	7653	5000 9
"	22...	" Balance " " "	7725	18992 13
August	1...	" Advance on account	7749	10000 0
"	24...	" "	7854	40000 0
Septr.	11...	" "	7921	23700 0
October	9...	" "	8000	30000 0
"	28...	" "	8091	10000 0
Novr.	26...	" "	8191	45000 0
				233994 96
1862.				
Jany.	1...	To Balance brought down	.....	143923 0
May	13...	To Certificate advance on account	8831	2000 0
				145833 0
May	31...	To Balance	.....	$145923 0

EXHIBIT,

tmental Buildings,

Number of Certificate.	Amount.
	$ cts.
5576	2254 07
5704	3885 12
5861	10350 22
5939	5718 95
6088	24149 85
6260	11830 51
6276	5000 0
6288	32009 55
6442	32233 96
6564	20000 0
6870	10313 65
6904	37705 82
6914	1076 0
6970	8000 0
	204548 60
.....	8000 0
7133	16000 0
7287	18360 39
7405	13920 38
7506	21424 43
7521	1269 75
	78974 95
.....	126 97
7600	30000 0
7620	26175 86
7653	5000 9
7725	18992 13
7749	10000 0
7854	40000 0
7921	23700 0
8000	30000 0
8091	10000 0
8191	45000 0
	233994 96
.....	143923 0
8831	2000 0
	145833 0
.....	$145923 0

No. 37.

Ottawa, in account current with Department of Public Works.

Cr.

When Received.	Particulars.		Amount.
			$ cts.
1860.			
February 8...	B Estimate for January, 1860		2254 97
March 16...	" February, "		3885 12
April 20...	" March, "		10350 22
May 8...	" April, "		5718 95
June 9...	" May, "		24149 85
" 20...	" Supplementary for May, 1860		11830 51
July 17...	" June, 1860		33009 55
August 18...	" July, "		33253 96
October 9...	" August and September, 1860		32313 65
Novr. 17...	" October, 1860		38705 82
" 30...	This amount returned on Supplementary Estimates for May, now credited...		1076 0
Decr. 10...	Estimate for November not approved		
	Balance		8000 0
			204548 60
1861.			
March 6...	By corrected Estimate, 28th February, 1861	14316 54	42360 39
April 12...	Estimate for March, 1861, less accounts, No. 9, 10, 11	396 16	13920 38
May 4...	" April, " corrected		22567 21
	Balance		126 97
			78974 98
June 20..	By Estimate for May, 1861		26302 83
July 18...	" June, "		18992 13
August 14...	" July, "		19904 44
Sept. 9...	" August, "		24872 56
	Balance		143923 0
			233994 96
	Balance		145923 0
			145923 0

EXHIBIT, No. 38.

MEMORANDUM FOR CONTRACT.

PUBLIC BUILDINGS AT OTTAWA—PARLIAMENTARY AND DEPARTMENTAL.

THOS. MCGREEVY, Contractor, Quebec.

Securities :—LAWRENCE STAFFORD, Merchant, Quebec.

Amount of contract for both. ..	$579,000.
Add for fire-proofing Departmental	43,918
Total	$622,918

That is to say :

For Parliamentary	$346,000
For Departmental, east	161,000
For Departmental, west	115,918
Total	$622,918

The Schedules of Prices submitted to be taken, on the understanding that if the total quantity of work calculated at these prices, exceeds the contract price of $622,918, then these prices shall be reduced pro rata for all the purposes for which they were required.

Time of completion.

For Departmental Buildings	1st of February, 1862.
For Parliamentary Buildings	do July, 1862.

EXHIBIT, No. 39.

MEMORANDUM FOR MR. BERNARD.

Two separate contracts to be prepared for the public buildings at Ottawa.

1st CONTRACT : PARLIAMERTARY BUILDINGS.

THOMAS MCGREEVY, (Master builder of Quebec), Contractor.

SECURITIES :

STAFFORD, (Merchant), Quebec ;— FLANNIGAN, (Lumber Merchant), Quebec.

Contract price, including fire-proofing	$348,5000
Time of completion	1st July. 1862

Specification, Questions and Answers, and Schedule of Prices, to be attached to Contract. Plans signed by parties and remaining of record in offices of Public Works.

2nd CONTRACT : DEPARTMENTAL BUILDINGS.

JONES, HAYCOCK & Co., Contractors;—The firm consisting of Ralph Jones, (contractor), Port Hope; Edward Haycock, (contractor), Port Hope ; Thomas C. Clarke, (civil engineer), Port Hope; carrying on business as "Contractors for Building," under the firm of Jones, Haycock & Co.

SECURITIES :

GEO. W. BURTON, (Barrister), Hamilton ;—A. N. MCLEAN, (Gentleman), Toronto.

Contract price, including fire-proofing	$278,810
Time of completion	1st February, 1862.

Specification, do. for Fire-proofing, and Schedule of Prices, to be attached to Contract. Plans signed by parties and remaining of record in offices of Public Works.

EXHIBIT, No. 40.

COPY of a Report of a Committee of the Honorable the Executive Council, approved by His Excellency the Governor General in Council on the 7th December, 1859.

On a memorandum, dated 5th December, 1859, from the Hon. the Commissioner of Public Works, submitting two drafts of contracts, prepared by the Hon. the Law Officers of the Crown, to be entered into by the contractors for the erection of the Parliamentary and Departmental buildings in the City of Ottawa, and requesting Your Excellency's instructions as to the execution thereof.

The Committee respectfully recommend the approval of the contracts as settled by the Law Officers of the Crown, and that the Hon. the Commissioner of Public Works be instructed by Your Excellency to cause the same to be executed and the works proceeded with without delay.

(Certified,) WM. H. LEE, C. E. C.

EXHIBIT, No. 41.

OBJECTIONS TO PROPOSED DRAFT OF CONTRACT.

Paragraph, No. 3.—If the contractor be retarded hereafter in his progress of the works, either by the Commissioner or Architect, how can he be bound to hand over the building on 7th February, 1862, and in consequence of said delays, if he do not thereby forfeit all that may then be due him? No objection to insert.

Paragraph, No. 5.—Is it just that the Contractor shall be bound to keep insured the building and materials to the amount of 75 per cent. during the entire progress of the works?

Paragraph, No. 10.—If any changes, alterations or additions (which mean extras, and which idea ought not to be entertained at present by the Commissioner) shall happen during the progress of the works, is it fair that the Commissioner shall have the right to fix the prices for which these extras shall be made?

Paragraph, No. 12.—If during the progress of the works there shall arise any difference of opinion as to what is to be considered as work included in the contract, although not specified in said contract, is it fair that the decision of the Commissioner on any such difference of opinion shall be taken as final?

Paragraph, No. 13.—If any difference of opinion shall hereafter arise as to the interpretation of this contract, is it just that in such an event the decision of the Commissioner shall be final and that the Contractor shall be called upon to waive any claim for arbitration?

Another paragraph, marked number 3, being the last clause of the proposed draft of contract, is injurious to the Government, and would ruin any contractor.

EXHIBIT, No. 42.

(Copy.) QUEBEC, C. E., 7th December, 1859.

SIR,—I have the honor to transmit to you the two contracts for the erection of the Parliamentary and Departmental Buildings at the City of Ottawa, together with the bonds to be executed by the sureties of the contractors respectively.

These instruments have been revised and settled by the Honorables the Attorney General for Lower and Upper Canada, and are the same as referred to in the Order in Council of 7th December, instant, and are to be executed by yourself and by the contractors. The specifications and other necessary documents you will find have been attached to each.

I have the honor to be, sir,
Your very obedient servant,
(Signed,) H. BERNARD.

The Hon. the Commissioner of Public Works.

EXHIBIT, No. 43.

(Copy of No. 31,364. Sub. 1,026.)

QUEBEC, 23rd March, 1860.

GENTLEMEN,—I am directed by the Honorable the Commissioner to request that you will be pleased to transmit, at your earliest convenience, the schedule of prices upon which the extra works at the new Parliament Buildings should, in your opinion, be returned and paid for on the progress estimates.

(Signed,) T. TRUDEAU,
Secretary.

Messrs. FULLER & JONES,
Architects, Ottawa.

EXHIBIT, No. 44.

(Copy of No. 46,205.)

OTTAWA, March 30, 1860.

To the Hon. the Commissioner of Public Works:

SIR,—In answer to your communication of the 23rd ult., we have the honor to lay before you the three following prices fixed for extra work on the Parliament Buildings, and at the same time beg leave to state that it is impossible to fix with any degree of accuracy a complete schedule of prices until the works are further advanced.

Excavation in work, not exceeding 5 feet in depth	$1.25
Do do below 5 feet in depth	1.90
Masonry in foundations and backing (per toise)	8.00

We have, &c.,
(Signed,) FULLER & JONES.

(NOTE ON BACK OF ABOVE.)

Deputy, the Commissioner:

After seeing the work and discussing the prices with the Architects and Clerk of Works, I have agreed to these prices as fair and just for the extra work, and the estimates will, in future, be made at these prices.

(Signed) S. KEEFER,
17th April, 1860.

Note on back:
Approved. (Signed,) J. R.

EXHIBIT NO. 45.

(Copy of 30783. Sub. 1027.)

DEPARTMENT OF PUBLIC WORKS,
QUEBEC, 7TH FEB., 1860,

GENTLEMEN,—In reference to your letter of the 1st instant, reporting on the nature of the soil for the site of the right hand block of the Departmental Buildings, Ottawa, I am directed by the Honorable the Commissioner to inform you that he approves of carrying the foundation down to the rock in all parts of the right hand block of the Departmental buildings, but before the order is given for it he desires to be furnished with an estimate in detail

of the quantity of masonry and the prices at which the extra work is estimated, which with the assistance of the Clerk of Works, you are desired to prepare and send to this office.

(Signed,) T TRUDEAU,
Secretary.

Messrs. Stent & Laver,
Architects, Ottawa.

EXHIBIT NO. 46.

(Copy of No. 31181. Sub. 1027.)

QUEBEC, 8th March, 1860.

GENTLEMEN,—In reference to your letter of the 28th instant, giving as requested, the prices at which your calculations for the proposed extra depth of foundations to the rock of right hand Departmental buildings have been made, I am directed by the Honorable the Commissioner to acquaint you that the Deputy Commissioner to whom the matter was submitted, does not approve of the prices given.

I have the honor to be, gentlemen,
Your most obedient servant,
(Signed,) T. TRUDEAU,
Secretary.

Messrs. Stent & Laver,
Architects, Ottawa.

EXHIBIT NO. 47.

(Copy of 31365. Sub. 1027.)

DEPARTMENT OF PUBLIC WORKS,
QUEBEC, 23rd March, 1860.

GENTLEMEN,—I am directed by the Honorable the Commissioner to request that you will be pleased to furnish him with a list of prices upon which the extra work at the new Departmental buildings, should in your opinion, be returned and paid for on the Progress Estimate.

I have the honor to be, gentlemen,
Your obedient servant,
(Signed,) T. TRUDEAU,
Secretary.

Messrs. Stent & Laver,
Architects, Toronto.

EXHIBIT, No. 48.

(Copy of No. 47,622. Sub. 1027.)

OTTAWA, June 16, 1860.

SIR,—In our communication of the 8th inst. accompanying the estimate for May of works done on the Departmental Building here, reference was made to some items to which prices had not been affixed and which would form a supplementary estimate after a conference of the architects and clerk of works had decided thereon.

We beg herewith to forward the said supplementary estimate for the approval of the Honorable the Commissioner.

We have the honor to remain, sir,

Your obedient servants,

(Signed) STENT & LAVER.

T. Trudeau, Esq.
Secretary Department Public Works.

(Copy of No. 47651.)

DEPARTMENT OF PUBLIC WORKS,
QUEBEC, 21st June, 1860.

Memorandum on the subject of the supplementary estimate for Departmental Buildings, Ottawa, with No. 47622.

Some of the rates in supplementary estimate rule higher than in previous returns ; to wit:

In proper estimate No 5, Rock Excavation in drain right hand block below 10 feet is rated $3.00.

In supplementary estimate, Rock Excavation in drain left hand block is rated $5.00.

Without the proper local knowledge of any circumstance warranting this increase, as also for the high rate per superficial foot of extra labor on arches of cold air ducts a $2.50. I would prefer that the prices affixed as above by the Architect and Clerk of Works should be deemed satisfactory to the Commissioner; otherwise the signature of any other party unacquainted with the difficulties of a local character, can only be attached in faith of the correctness and judgment of these gentlemen.

Respectfully submitted,

(Signed,) F. S. RUBRIDGE, A. E., P. W.

T. Trudeau, Esq., Secretary.

EXHIBIT, No. 49.

(Copy of No. 45172. Sub. 1027.)

OTTAWA, Feb. 1, 1860.

The Honble. Commissioner of Public Works.

SIR,—We beg to inform you that we have had pits excavated on different parts of the site of the right hand block of Departmental Buildings for the purpose of ascertaining the nature of the soil and the depth from the surface to the rock.

We find the soil to consist of about 5 feet of loamy sand next the surface and an equal quantity of clay immediately below it.

The depth to the rock at the south east corner of the building is 13 feet 9 inches, and at the south west corner is 11 feet 9 inches, whilst at the north west end of the building it is not more than 6 feet below the surface, and at the proper depth to receive the foundation walls of the building.

We beg to suggest the desirability of excavating for all the foundation walls to rest on the rock as we fear the building will be otherwise insecure. We have prepared an estimate of the additional cost of excavation and walling required to accomplish this and find the amount to be four thousand two hundred and seventy five dollars ($4275.) Waiting the favor of your reply,

We have the honor to remain, sir,

Your obedient servants,

(Signed) STENT & LAVER.

(NOTE ON BACK OF LETTER.)

The Commissioner approves carrying the foundation down to the rock in all parts of the right hand block of the Departmental Buildings, but before the order is given for it desires to be furnished with an estimate in detail of the quantity of masonry and the price at which the extra work is estimated, which, with the assistance of the Clerk of Works, the Architects are desired to prepare and send to this office.

(Signed,) S. KEEFER.

EXHIBIT, No. 50.

(Copy of No. 45,594.)

OTTAWA, Feb. 28, 1860.

SIR,—Referring to your favor of the 7th inst. No. 30783, requesting to be furnished with a detailed estimate and prices for proposed extra depth of foundations to the Rock of right hand Departmental building—we beg to say that we find it impracticable to furnish you with the precise quantities of work, owing to the uncertain level of the rock, but annex herewith the prices on which our calculations for the extra work have been made.

We have reason to believe, on further examining the ground, that the approximate estimate which we furnished in our communication of the 1st inst. will not be exceeded.

Masonry per toise of 72 feet in trenches, $9.66.

Rock excavation in trenches below 5 feet below the surface, $1.90 per yard cube.
" " to 5 feet deep $1.25 "

We have, &c.,
(Signed,) STENT & LAVER.

(NOTE ON BACK OF ABOVE.)

I do not approve of these prices—they are too high. When the work commences the opinion of the Clerk of Works should be asked.

(Signed,) S. KEEFER.

The Hon. the Chief Commissioner Public Works.

EXHIBIT, No. 51.

(Copy of No. 45,880.)

OTTAWA, March 12, 1860.

SIR,—We are in receipt of your favor of the 8th inst., No. 31181, informing us that the Deputy Commissioner does not approve of the prices given by us for extra walling and excavation, which we had the honor of submitting to you in our letter of the 28th ult.

We beg to say that the prices were arrived at in a conference with Messrs. Fuller & Jones, Mr. Morris and ourselves, held for the special purpose of arriving at prices for extra work—the decision and prices being entered on the minute book at the Clerk of Works' office and applying equally to both the Parliamentary and Departmental Buildings, the toise of 54 feet cube being used in the Parliamentary Building, and the local toise of 72 feet adopted by us, the prices being in the same proportion.

We take the liberty of suggesting that a schedule of prices for extra work shall be prepared by the several architects employed on the Public Works here, which shall be the basis upon which all extra work shall be valued,

We have, &c.,
STENT & LAVER.

The Hon. the Commissioner Public Works.

(NOTE ON BACK OF ABOVE.)

The Commissioner.

This is a good suggestion and I recommend that it be at once acted on by calling upon each of the architects and the Clerk of Works to forward a list of the prices upon which the extra work should be returned and paid for in the proper estimates.

(Signed,) S. KEEFER.

(NOTE ON BACK IN SECRETARY'S WRITING.)

"Act on this."

EXHIBIT, No. 52.

(Copy of No. 46,521.)

OTTAWA, April 14, 1860.

SIR,—Referring to your letter of the 23rd ult., No. 31365, Subject No. 1027, we beg to inform you that we have conferred with the Deputy Commissioner, S. Keefer, Esq., respecting the extra prices for additional works at the new Department Buildings, during his visit to Ottawa this week.

He (Mr. Keefer) approves of our suggestion to submit the prices for all extra work to a conference of the several architects, and requests that such prices shall, in all cases, before being certified by us, be laid before the Commissioner for his approval.

These instructions, we understand, apply respectively to all the Public Buildings in Ottawa.

We are, sir, &c.,

(Signed,) STENT & LAVER.

T. Trudeau, Esq., Secretary Public Works.

EXHIBIT, No. 53.

(Copy of No. 47762.)

OTTAWA, June 28, 1860.

SIR,—We beg to acknowledge the receipt of your letter of the 26th inst., No. 32709, Sub. 1027, and the Supplementary Estimates enclosed.

For the information of the Hon. the Commissioner, and in explanation of the prices referred to in your letter, viz: upon "Extra labor arches of cold air ducts" and "Extra labor face work of smoke flue arches of boiler house,"—we beg to state that the cause of the difference in the price is the additional rate of wages given since the strike. The arches in the boiler house having been worked a long time previous to that event, though not set. An additional reason is, the nature of the work upon the arches, which have been cut with great precision and care to meet their requirements. The third and principal reason which makes the price appear high is in the mode of measurement adopted, which is, measuring only the external face of the work and not the beds and joints. If this latter practice, which is the general custom in all large works was adopted, the area would be more than doubled, and though the price would be less the gross amount would be greater, as all such work being sunk or circular is invariably put at double that of plain surface work of the same kind, and is the basis of our calculation in the present instance on the partial measure. There are no additional arches in connection with smoke flues of this kind, the others being priced at 40 cents, but there still remains about 12 to be built over cold air ducts which will require equal care in construction. There are other portions of extra work upon which the prices are put low, and which from their nature will not bear even their actual value, such is for instance the "extra labor face work of cold air ducts" for

which the contractors required the same as the boiler house, viz: 90 cents per foot and which is of almost equal quality, but from the circumstances we did not feel justified in allowing a higher price than that named, viz: 37 cents; the same also of the arches priced 40 cents.

In reference to "the additional prices put upon extra work beyond those of the previous estimate" to which you call our attention, we beg to refer you to our letter of the 19th April accompanying the estimate for March, in which the same apparent discrepancy occurs in "excavating drain below 10 feet in left hand building." (The only item in which a difference occurs.)

The peculiar formation of the rock is such that it is impossible to make progress with the excavation, and equally difficult to arrive at a correct value of the work done.

We are satisfied that the estimate sent is below the cost—some portions yet to be excavated will greatly exceed the prices named, $5 per yard, and we beg further to state in reference to this particular portion of the work that we have given instructions to the Clerk of Works to keep an accurate account of the labor exended, to enable us at completion, to ascertain the actual outlay and allow a fair profit upon the same to the contractor. The prices in question were left open till Mr. Stent's return from Quebec, in order to determine them in council with the other architects and Clerks of Works as submitted to the Honorable the Commissioner and approved by him on a former occasion.

Waiting your further instructions in reference to the estimates returned to us, and trusting the explanations given will be satisfactory to the Commissioner.

We have, &c.,
(Signed,) STENT & LAVER.

T. Trudeau, Esq., Secretary Public Works.

(MEMORANEA ON BACK OF NO. 47,762.)

(Mem. 1.) Referred to Mr. Rubidge.
(Signed,) S. KEEFER,
2nd July, 1860.

(Mem. 2.) The architects state "the cause of the difference in the prices is the additional rate of wages given since the strike."

I find "enumerated" in the contract, printed schedule and scale of rates, that wages of stone cutters, masons, labourers, &c., are fixed and detailed to be allowed in progress estimates "for alterations, additions or works dispensed with together with extras." If the fluctuation in wages notwithstanding, should govern the calculations of the architects, (although wages are clearly among the "enumerated" items and not subject to valuation) the explanation offered by the architects may be deemed by the Commissioner satisfactory and the supplementary estimates should be paid.

(Signed,) F. P. R

(Mem. 3.) It was clearly understood that contractors were not bound by the schedule rates for the performance of extra work although it is so expressed in the heading of the schedule. The heading was not corrected when it was attached to contract, they objected but they were told it would not govern the extra work.

(Signed,) S. KEEFER.

[Mem. 4.] The Secretary.

Certificate to be issued for $11,830.50 in payment of this estimate.

Write to architects to say that a certificate has been issued for the sum of $11,830 50 in payment of the supplementary estimate for May. That the Deputy Commissioner has deducted half the allowance in items 1, 2, 3, because he cannot approve of prices which range from $46.60 to $67.50 per cubic yard. It is possible that such prices are not contained in the estimate, but from the manner in which it is made out it would appear so. If this work can be returned by the cubic yard or toise he will be better able to judge of the prices. He desires that the contractors should be paid fair prices, but feels he would

not be justified in giving his approval to any that apparently so far exceed what is just and reasonable.

(Signed,) S. KEEFER.

11th July, 1860.

EXHIBIT, No. 54.

QUEBEC, Nov. 17, 1859.

S. Keefer, Esq., Dep. Com. Public Works, Quebec.

SIR,—In a recent interview with you it was acceded that o[illegible]ration as Architects for the Parliament Buildings was to be the customary ch[illegible] of the profession, namely, five per cent. on the outlay, and that upon the reception of the tenders we should be at liberty to draw upon account of the same. We shall be obliged, in the present instance, if you will kindly give us an order for $4,000.

We have the honor to be, sir,

Yours faithfully,

(Signed,) FULLER & JONES.

(ON THE BACK OF THE ABOVE.)

To the Commissioner.

It was the understanding that each architect should carry out his own design and that the compensation for each should be the usual one in the profession of 5 per cent. on the outlay. These architects have spent a considerable sum in preparing the detailed drawings and specification for tender, and are, in my judgement, entitled to receive a first payment of $4000, as herein applied for.

(Signed,) S. KEEFER,
18th November.

Payment of $3,000 made on this application.

[Signed,] S. K.

EXHIBIT, No. 55.

No. 44,173. QUEBEC, November 19, 1859.

To the Honorable Commissioner of Public Works.

SIR,—We have been requested by the Deputy Commissioner to address you on the subject of remuneration for our professional services in the erection of the Parliamentary and Departmental Buildings at Ottawa.

In compliance with the order in Council, we attended at Quebec to receive instructions from the Commissioner of Public Works for the preparation of specifications and working drawings, and were then informed that we should be employed on the usual professional terms, viz: Five per cent. upon the outlay.

This per centage we understand to include all charges, with the exception of travelling expenses from Ottawa to Quebec, when required to attend upon the Commissioner, and that we shall not have any claim for charges upon any extra work that may be necessary to carry out the Buildings according to the true intent and meaning of the Plans and specifications; these having been so well considered, we do not anticipate any extras will arise.

Should any works in addition be ordered requiring new Plans, the same to be subject to the same rate of charge.

We would respectfully submit that the works being now let, as we think, too low, our labour and responsibility is thereby increased, and our commission upon the actual value of the work will not be equal to five per cent.

Taking into consideration the extent of the work and the great responsibility devolving upon us, we trust that you will confirm the understanding we had with the Deputy Commissioner.

We have the honor to remain, sir,
Your obedient servants,
(Signed,) FULLER & JONES,
Architects, Parliament Buildings.
(Signed,) STENT & LAVER,
Architects, Departmental Buildings.

EXHIBIT, No. 56.

DEPARTMENT OF PUBLIC WORKS,
QUEBEC, 29th November, 1859.

No. 1,923.

To His Excellency the Right Honorable Sir Edmund Walker Head, Baronet, Governor General, &c., &c., &c.

The Commissioner of Public Works has the honor to submit herewith a proposal by the Architects for the Parliamentary and Departmental Buildings at Ottawa in reference to the terms on which their services are to be given. He recommends that their remuneration be five per centum on the outlay, provided that the gross amount of commission do not exceed eight thousand two hundred and fifty pounds, and that this sum be divided in proportion to the cost of the respective Buildings. That this percentage shall include all charges of every description in connection with their professional services, and that under no circumstances whatever, whether of deviation from, or addition to the Plans, or delay in the progress shall a greater sum be claimed by them. That it shall be paid according to the progress of the work at the sole option and discretion of the Commissioner.

Respectfully submitted,
(Signed,) JOHN ROSE,
Commisioner.

No. 1929.

Copy of a report of a Committee of the honorable the Executive Council, approved by His Excellency the Governor General in Council on the 2nd December, 1859.

On the Report of the Honorable the Commissioner of Public Works dated 29th November, 1859, submitting a proposal by the Architects for the Parliamentary and Departmental Buildings at Ottawa in reference to the terms on which their services are to be given, and recommending that their remuneration be five per centum on the outlay, provided that the gross amount of commission do not exceed eight thousand two hundred and fifty pounds, and that this sum be divided in proportion to the cost of the respective Buildings.

That this per centage shall include all charges of every description in connection with their professional services, and that under no circumstances whatever, whether of deviation from, or addition to the plans, or delay in their progress, shall a greater sum be claimed by them, and that it shall be paid according to the progress of the work at the sole option and discretion of the Commissioner.

The Committee concur in the Report of the Honorable the Commissioner, and submit the same for Your Excellency's approval.

Certified,
(Signed,) WM. H. LEE, C. E. C.

EXHIBIT, No. 57.

(Copy of No 50458.)

DEPARTMENT OF PUBLIC WORKS,
QUEBEC, 20th November, 1860.

T. Trudeau, Esq., Secretary.

SIR,—My examination of the October progress estimates for the Departmental Buildings at Ottawa, furnishes me with an occasion for the following remarks, which, from the estimate being placed in my hands, I feel it my duty to make.

In order to curtail their excessive length as well as to simplify them, future estimates might only shew in detail the items of the month's work and materials delivered, added to the gross amount of preceding estimates, inserted in one line of figures, leaving the total quantities of each kind of work to be shewn in *Quarterly Returns*.

My signing the estimates, as desired by the Commissioner, must be taken merely as a proof of having compared the present with the foregoing estimates regarding the amounts to be paid, and as requiring from me any report thereon. But in the October estimate charges appear which as contract and extra works differ so widely in their value, (such extra works not being governed by the provisions of the contract as to payment therefore by the schedule of prices attached to the same) that I cannot vouch for these returns in any other light of responsibility than that above expressed.

For instance, Rubble masonry per toise contract.....	$ 3.50
do do extra..... .	8.00
Brickwork per M. contract.....	$ 7.00
do do extra	12.50

With reference to drainage also. Rock excavation in drains below the extraordinary depths of 20 and 25 feet is valued at $6 per yard, and the question arises whether this great expenditure was foreseen, and might have been reduced by basing the foundations of the buildings otherwise than they now are. In my examination of the amount of work done, I find that for the drains of the Departmental buildings alone, there has been already returned an outlay of $39,752.05 or nearly £10,000, being one-seventh of the whole Contract sum.

But again nearly the whole of this large expenditure, yet incomplete, is classed as *extra work* at high rates, while nothing on the face of the estimates shews any work done on *contract drains*.

I find upon reference to the Contract in the printed pamphlet the following: Page 14. "Perform also all excavation for drains, arches, ventilating funnels, water pipes or "otherwise, required to carry on the work, *as soon as the walls are built up to the ground* "*level*.

"The spaces all round the walls are to be filled in, and well rammed, the same "also to the trenches for drains, to be *four feet* at the *shallowest part*. Immediate provi- "sion to be made for the thorough and complete drainage of every part of each block &c., "&c. "Page 17, The whole of the drains are to be constructed with patent earthen- "ware glazed socket pipes, &c. Page 18, the principal drains are to be 12 inches in "diameter, and all subordinate ones 6 inches in diameter, 1000 feet in length of each to "be estimated for."

The foregoing are clearly provisions for contract drainage, but of the 2000 lineal feet required to be done ("so soon as the walls were built up to ground level") I can find no return on the estimates. The 51 feet of glazed stoneware pipes there mentioned being 4 inch, whereas 6 inch pipe is the least specified diameter. The whole, as aforesaid, being paid for as *extra drainage*. The proportion of extra to contract work up to, and including the October estimate is 86 per cent in excess, or the value of contract work is $81,030. Extra work $132,114.

Under a low tender the Contractor will be desirous of claiming the largest amount of

extras possible, and the character and integrity of the Architects are the safeguard and protection to the public interests in this matter.

I have the honor to be, sir, your obedient servant,

(Signed,) F. P. RUBIDGE,
A. E. P. W.

MEMORANDA ON BACK OF ABOVE.

The estimate referred to certainly appears of great length, but before deciding on altering the form of it, it might be well to ascertain whether the Architects or Clerk of Works have any suggestion to make on the subject. Meantime, the present estimate, if otherwise correct should be paid.

(Signed,) J. PAGE.

Pay.

S. KEEFER,
Deputy Commissioner.

23rd November, 1860.

EXHIBIT, No. 58.

1st December, 1860.

The Commissioner.

Having just returned from Ottawa, I have the satisfaction of reporting that the work is going on well, and is executed thus far in a good substantial manner. From the nature of this report and a careful examination of the estimate itself, it appears to be necessary that the estimates of the Architects should undergo revision. In the course of a few days building must necessarily be suspended, when a remeasurement should take place as a check on the progress estimates, the form of which can be materially simplified and improved. The contract to be separated from the extra work and put on separate sheets. Mr. Rubidge, being the architect of the Department and having drawn attention to the large amount of extra work and his inability to check it at this distance from the works. I recommend that he be instructed to proceed to Ottawa to measure up the work at the close of the building season with power to call upon the Architects, Clerks of Works, and Foremen for explanations and measurements and with their united assistance to furnish an estimate of all contract and extra work classified and returned in accordance with the terms of the Contract up to the close of the present building season. Such estimate to shew the quantity of excavation masonry and brickwork now done, and the materials delivered and on hand for the works next season in addition to those used in the building during the past season, of which no account need be taken, thereby getting rid of the useless quantities first added and then deducted in the present progress estimates.

This matter is of so much importance that I consider it my duty to refer it for the consideration of His Excellency in Council, with the recomendation that the Chief Engineer should proceed to Ottawa and furnish the Department with a comprehensive report on the whole of the operations to date.

(Signed,) J. R.

Mr. Page.

EXHIBIT, No, 59.

No. 30:073.

DEPARTMENT OF PUBLIC WORKS,
Quebec, 12th December, 1859.

GENTLEMEN,—In reference to your letter of the 19th November last, on the subject of remuneration for your professional services in erecting the Parliamentary Buildings in Ottawa, I am directed by the honorable the Commissioner to inform you, that by an order

in Council of the 2nd December, your remuneration is to be five per centum on the outlay, provided that the gross amount of commission do not exceed eight thousand two hundred and fifty pounds, and that this sum be divided in proportion to the cost of the respective buildings. That this percentage shall include all charges of every description in connection with your professional services, and that under no circumstances whatever, whether of deviation or addition to the plans, or delay in their progress, shall a greater sum be claimed by you, and that it shall be paid according to the progress of the work, at the sole option and direction of the Commissioner.

I am, &c.,
(Signed,) J. G. VANSITTART,
For the Commissioner.

Messrs. Fuller & Jones, Architects, Ottawa.

EXHIBIT, No. 60.

No. 30,074.

DEPARTMENT OF PUBLIC WORKS,
Quebec, 12th December, 1859.

GENTLEMEN,—In reference to your letter of the 19th November last, on the subject of remuneration for your professional services in erecting the Departmental Buildings in Ottawa, I am directed by the Honorable the Commissioner to inform you that, by an order in Council of the 2nd December, your remuneration is to be five per centum on the outlay provided that the gross amount of Commission do not exceed eight thousand two hundred and fifty pounds, and this sum be divided in proportion to the cost of the respective buildings. That this percentage shall include all charges of every description, in connection with your professional services, and that under no circumstances whatever, whether of deviation or addition to the plans, or delay in their progress, shall a greater sum be claimed by you, and that it shall be paid according to the progress of the work, at the sole option and discretion of the Commissioner.

I am, &c,
(Signed,) J. G. VANSITTART,
For the Commissioner.

Messrs. Stent & Laver, Architects, Ottawa.

EXHIBIT, No. 61.

(Copy of No. 36,844. Sub. 1,025.)

F. P. Rubidge, Esq., A. E. P. W.

SIR,—The Commissioner of Public Works is desirous that you should at once proceed with the Deputy Commissioner to the City of Ottawa, and at least once a month hereafter, (in accordance with the suggestion of the Chief Engineer,) for the purpose of of examining the estimates fully on the spot, and further assisting with your advice and co-operation in any measures to be adopted for restricting the present and future expenditure thereon within the contract sums and to such other additional outlay authorized or admitted up to the date of Mr. Page's report, and referred to in that document.

With those objects in view it will be incumbent on you to reject all proposed outlay for *prospective works recommended by the architects*, whether of improvement, extension, ornamentation, lighting, fire-proofing, covering roof with lead, alteration of skylights, &c., &c., however desirable such works or recommendations might otherwise be under an unlimited appropriation. You will admit no extraneous works whatever, beyond what may be absolutely necessary for the stability of the walls or safety of other portions of the edifices under contract, such as strengthening buttresses, &c.

The proposed expenditure for water supply to the buildings, gas, &c., may, it is be-

lieved without any great disadvantage to the public interests, remain over for more mature consideration at a later period.

The terms of the order in Council and the Departmental memoranda made thereon, give the fullest authority to regulate in such way as may be considered to promote efficiency, the several duties of the various Clerks of Works and all other local officers connected with the works.

(Signed,) T. TRUDEAU,
Secretary.

EXHIBIT, No. 62.

(Copy.)

PARLIAMENT BUILDINGS.

Plans Tinted Red.

Motto—"SEMPER PARATUS."

As great diversity of opinion is sure to arise as regards the style to be adopted for these buildings, we have prepared a second design in the Italian style. The accommodation is nearly the same as that afforded in the other design, but some slight difference has been made in the position of the houses.

The library in this plan has not so large an area on the ground floor, but with galleries it affords the number of square feet specified in the instructions.

The arrangements and accommodation in basement would be similar to those in the other.

All the details of ventilation would also be similar.

The cost of the design would be about the sum named for the other.

Should the arrangements of the plan of this design be preferred to the style of the exterior of the other design, the architects beg to state that it might be readily adopted.

DEPARTMENTAL BUILDINGS.

Tinted Red.

"SEMPER PARATUS."

The Architects regret that they have not had time to prepare plans for both blocks, but as the other Department would be similarly arranged, they trust the drawings furnished will be sufficiently explanatory.

This block accommodates—
Provincial Registrar,
Provincial Secretary,
Customs Branch,
Audit Branch,
Adjutant General of Militia,
Indian Department,
Governor General and Staff,
Executive Council.
Crown Land Officers.
Receiver General.

These offices are arranged in three floors, all details as in other plans.

The cost of this plan would be within the sum named.

DEPARTMENTAL BUILDINGS.

Plans tinted Black.

"SEMPER PARATUS."

These Departments are arranged in two blocks, in accordance with the instructions and are designed in the same style as the main building.

One block contains

Finance Minister,
Department Public Works,
Post Master General,
Crown Lands and Woods and forests.

The other block,

Provincial Registrar,
Provincial Secretary,
Customs Branch,
Adjutant General of Militia,
Indian Department,
Bureau of Agriculture,
Governor General and Staff,
Executive Council,
Crown Law Officers,
Receiver General.

NOTE.—Want of time has prevented the completion of the basement plans. The architects beg to state that they would afford all requisite accommodation for messengers, vaults, &c.

The perspective view shown is that of the first named block, as the details are similar in character to the main building, it was not considered necessary to furnish other drawings.

The same system of ventilation and warming, and construction would be pursued.

The architects are fully satisfied that the buildings of this Department could be erected for the sum named.

LIST OF DRAWINGS.

"SEMPER PARATUS."

GOTHIC DESIGNS.

Plans Tinted Black.

PARLIAMENT BUILDINGS.

Drawing No. 1, Basement Plan.
" 2, Ground Plan.
" 3, Upper Floor Plan.
" 4, South elevation and section.
" 5, East or West elevations and sections.
" 6, South-west perspective view.
" 7, North-east perspective view.

DEPARTMENTAL BUILDINGS.

Drawing No. 8, Ground Plan.
" 9, " "
" 10, Upper Floor Plan.
" 11, " "
" 12, Perspective view.

ITALIAN DESIGNS.

Plans Tinted Red.

PARLIAMENT BUILDINGS.

Drawing No. 1, Ground Plan.
" 2, Upper Plan.
" 3, Sections.
" 4, Elevations.
" 5, South-east perspective view.
" 6, North-east perspective view.

DEPARTMENTAL BUILDINGS.

Drawing No. 7, Ground Plan.
" 8, Principal Floor Plan.
" 9, Upper Floor Plan.
" 10, Sections.
" 11, Elevations.
" 12, "
" 13, Perspective view.

GOVERNOR GENERAL'S RESIDENCE.

Drawing No. 14 Basement Plan.
" 15, Ground Plan.
" 16, Principal Floor Plan.
" 17, First Floor Plan.
" 18, Transverse Section.
" 19, Longitudinal Section.
" 20, Elevation.
" 21, Perspective view.

The Gothic style may readily be adapted to the plan which is designed for the Italian, or the Italian may likewise be adapted to the plan which is designed for the Gothic.

PARLIAMENT BUILDINGS, OTTAWA, C. W.

REPORT AND GENERAL SPECIFICATION.

Plans Tinted Black.

No. 1, General arrangement.
" 2, Style.
" 3, External appearance.
" 4, Entrances.
" 5, Assembly Halls.
" 6, Galleries.
" 7, Corridors.
" 8, Rooms for the use of Members.
" 9, Accommodation for officers.
" 10, Speakers.
" 11, Reporters.
" 12, Picture Gallery.
" 13, Library.
" 14, Chaplain.
" 15, Librarian's Residence.
" 16, Vaults.
" 17, Post Office and Telegraph.
" 18, Messengers.
" 19, Usher of black rod and sergeant at arms
" 20, Committee rooms.
" 21, Open Courts.
" 22, Warming and ventilating.
" 23, Water Closets.
" 24, Water Tanks.
" 25, Windows.
" 26, Venetian Shutters.
" 27, Construction of roofs.
" 28, General Remarks.
" 29, Warming and ventilating, (remarks upon.)
" 30, Warming Winter.
" 31, Summer Ventilator.
" 32, Open Fire places.
" 33, Baths, lavatories and water closets.
" 34, Fire-proof construction.
" 35, Foundations.
" 36, Masonry and Brickwork.
" 37, Drains.
" 38, Outside facing of walls.
" 39, Inside lining.
" 40, Floors.
" 41, Roofs.
" 42, Glazing.
" 43, Concluding remarks.

PARLIAMENT BUILDINGS, OTTAWA, C.W.

(Copy.) No. 1.—*General Arrangement.*

By referring to the plans under motto "Semper Paratus," it will appear that the buildings are in the form of the letter T, having a south frontage of 536 feet, the arm extending 400 feet. The architects have placed all the offices and committee rooms in the most cheerful aspect for rooms in general use by the various offices and committees.

The front of the building might have been curtailed by placing the offices on three floors, but only at the risk of crowding the Parliament House, and interfering with the light and ventilation, whilst the extended frontage adds to the dignity and general appearance of the Facade.

No. 2.—*Style.*

The preparation of a design for this site is attended with much difficulty, owing to the different nature of the scenery when viewed from the river and from Wellington St. That from the former being of the boldest and grandest character, whilst that from the latter is more park like. Thus the Norman or Romanesque style from the great boldness of its detail, would be in keeping with the river front, but would be dull and heavy when viewed from Wellington Street. The architects consider that a building appropriated to the use of the Parliament should present in its exterior, a dignified, elegant, and also cheerful appearance, and that its character should tend more to the Palatial than the Castellated, have, after mature deliberation adopted the Gothic as the style most adapted to attain this end, and when properly treated, they believe it more capable of meeting every modern requirement than any other style, besides being much more imposing and picturesque, and less costly. The latter was most satisfactorily proved by George Gilbert Scott, Esq., of England, before a commission appointed for the purpose of taking evidence respecting the relative costs of the premeated designs for the Government offices, submitted in competition in 1857.

Mr. Scott's Gothic design was then proved to afford greater area for light, equal facilities for ventilation, and to present a more chaste and elegant external and internal effect at the same cost than any of the designs in any other style, and consequently Mr. Scott's designs were adopted for both offices. In the present case, the architects, after having inspected the truly magnificent site, selected for this building, were fully convinced that a Gothic building only could be adapted to a site at once so picturesque and so grand. In a building of this magnitude when accommodation is afforded for two houses of Legislature, with nearly equal requirements for offices, &c., a certain amount of uniformity in that portion was a necessity, and such being the case, the architects in accordance with the true principles of architectural design, have not attempted to conceal it; but by a judicious arrangement of chimney shafts, dormers, &c., have endeavored, and they trust, not unsatisfactory, to produce a broken and picturesque sky line. Another reason for the uniformity and the extended frontage on the south, were the facts that Wellington street runs parallel to it, and is approached by two streets at right angles, and it is further required by the board, that the Departmental Buildings should be arranged in two blocks and placed on either side. The north front is, though to a certain extent, uniform, so broken in outline that it would present a general contour, quite in unison with the grandeur of the scenery as viewed from the river. It is impossible, without occupying too much space and time, to enlarge upon this subject, and the architects merely quote the opinion recently arrived at by the commissioner before alluded to, namely, that it is now generally admitted that a Gothic design will cost no more than a classic one, and that there is nothing in the nature of the style to forbid the ordinary sash windows of almost any width up to six feet, glazed with single sheets of plate glass. Such an extreme width does not appear necessary in the present instance, but it is submitted that there is nothing about the character of the design to prevent the glass being made wider than shown wherever the necessity for it appears.

No. 3.—*External Appearance.*

The designers have endeavoured, not slavishly to copy the Gothic of any particular period or country, but the noble civic buildings of the Low Countries and Italy have afforded them suggestions. The lofty tower on the south front rising about two hundred feet to the apex, would prove a conspicuous and interesting object from all points of view, and being of ample dimensions, it forms on the ground level a noble Carriage Entrance for state occasions, and in the upper portion due provision has been made for an illuminated clock, which, from its elevated situation, would be seen from all parts of the city, and the space beneath would afford accommodation for a peal of bells &c.

Spiral stairs are provided in the tower, leading to the top it, where a beautiful view can be obtained, of the surrounding scenery.

It is proposed to face the building with the stone of the neighbourhood and introduce the various kinds, so as to give richness of effect in colour without sacrificing harmony and repose.

ENTRANCES.

No. 4.—*Public Entrance.*

The Architects would here remark, that they consider the frontage toward the town, as that in which the entrances for the public should necessarily be.

The entrance for the public is in the south front and under the main tower, with a handsome hall, 72 ⋈ 40 with pannelled roof, &c., having double doors. From this hall, spacious staircases lead to the galleries for the public on either side, and under these staircases due provision is made for public water closets and urinals, shut off by double doors, so that any possibility of smell &c, is prevented.

The entrance for the Governor General on public occasions, would be through the grand hall, immediately from which is a corridor leading to appartments appropriated to his use, and in close contiguity with the House of the Legislative Council. He can also enter, either by the Library or Speaker's entrrnce.

Members Entrance.

The Member's entrances are on the south front and lead through vestibules into the corridors surrounding the houses.

Entrance to Officers.

Entrance for officials are also on the south front, and are thus provided so as to be under the control of the messengers of the Departments.

Speaker's Entrance.

The entrances for the Speaker's of both Houses are on the east and west sides respectively.

Reporter's Entrance.

Reporters enter through lobbies to staircase and galleries and retiring rooms.

Librarian's Entrance.

Librarian's entrance is on the both sides of Library.

No. 5.—*Assembly Halls.*

The halls for Legislative Council and Assembly are placed on either side and divided by an open court. The Halls are respectively 90 ⋈ 45 affording the number of square feet specified, and being in proportion exactly the same as the House of Lords in the Westminster Palaces, ample means of ingress and egress are afforded, and that for the Speaker is in immediate connection with his office &c.

In halls of this kind, the Speaker's voice ought everywhere to be heard by direct radiation only, but it has been deemed advisable to secure all the reinforcing and reflecting power obtainable. For this purpose therefore, the ceiling has been formed flat in the centre, with inclined sides and ends, making its section as nearly as possible correspond with that curve proved to be the best accoustically. The lower part of the side walls also, as being valuable reflecting surfaces, have been left nearly plain, while the seat for the Speaker, a wooden canopied stall, is calculated by acting as a reinforcing or sounding board to reflect his voice over the further and lower parts of the hall. In order to destroy echo, the upper portion of these walls (which, were they to reflect sound would only throw it on the ceiling) have been broken up by piers and arches, and the galleries for Members and ex-Members, Ladies, Public, and Reporters, placed behind them. Each hall is lighted up by a range of windows on the east west and north sides of galleries, and by glazed panels in the ceiling, the latter obtaining light from external sky-lights. In the space between them, it is proposed to introduce gas light, with a proper proportion of sun burners, which would serve the double purpose of forming a ventilating chamber, and affording ample light to halls without any of the unpleasant effects of having the air contaminated by gas jets in halls.

No. 6.—*Galleries.*

The galleries for use of Members and ex-Members Ladies, Public, and Reporters, are placed over the corridors, thus leaving the body of the hall occupied by the sitting members quite free.

No. 7.—*Corridors.*

The Corridors surrounding the halls are amply lighted from the panels in ceiling and have external sky lights. The Architects beg to draw special attention to this feature in their design. One of the chief obstacles to the efficient warming of large halls in buildings of this class in any country, and more especially in Canada, is caused by the necessity of producing ample means of egress and ingress and the difficulty of warming the approaches thoroughly. In the present case it is quite obviated as the corridors have no direct communication with the external air, and the chamber formed between the glazed panels of the ceiling and the external sky lights answers the double purpose of a chamber for gas jets to light the corridors by night, and also a means of escape for vitiated air.

The manner in which this is proposed to be effected is more fully treated in that portion of this report relating to means of warming and ventilating.

No. 8.—*Rooms for use of Members.*

The wardrobes, reading rooms, lavatories, &c., are on the same level as the floor of the hall. The dining rooms, saloon, barbers shop with bath rooms, are on the floor beneath, approached by spacious staircases. The smoking rooms are so placed that all chance of annoyance is prevented, whilst they are at the same time in close proximity to the halls. The dining rooms are placed in close proximity to the kitchen, and the baths being nearer to the apparatus for warming, less difficulty would be found in providing an ample supply of warm and cold water.

No. 9.—*Accommodation for Officers.*

The chief clerk and his assistants, and those other officers whose business is chiefly with the house whilst in Session, are placed on the level of the hall, and in as close proximity as possible, and a suit of strong vaults are placed under the officers and approached only from the staircase especially provided, having a lift &c., and are entirely under the control of the chief clerk and his assistants.

No. 10.—*Speakers.*

The Speaker's house, &c., private entrance, office and dressing rooms, &c., and room for Secretary are in close proximity with the hall, The Architects have shewn (although not so required by instructions) a residence in every respect suitable for such an officer, and they beg to call attention to the arrangement shewn. On inspection it will be found that these residences are so designed that they may be omitted for the present, without, in any way, affecting the other arrangements.

No. 11.—*Reporters.*

The reporters have a separate entrance and stair case leading to their gallery and retiring rooms, &c., the latter being so placed as not to be in any way an annoyance to the House.

No. 12.—*Picture Gallery.*

Picture Gallery, of the area specified is of suitable height, lighted from above; is placed immediately north of the large central court, and forms a means of communication between the two houses and also the library.

No. 13.—*The Library.*

The Library is placed at the north of the Picture Gallery, and is approached therefrom by a corridor of suitable dimensions, the walls of which might be embellished by works of art. The area of the library on the ground floor is the amount required by the

instructions of the Board of Works, and will accommodate about fifty thousand volumes; there are three tiers of galleries with accommodation for about 50,000 each, which can be built as the space is required. A staircase is provided leading to external gallery, from which a view of the river can be obtained. The form is circular inside and polygonal outside, and is surrounded by rooms as specified by the librarian, with staircases forming approaches to the various galleries. The central part is surmounted by a semi-circular dome lighted by windows in the side, and by a circular light in the top of the dome. A separate entrance is provided for the use of the library, and the space underneath is appropriated for store rooms in connection therewith, and for warming apparatus, &c.

The roof is formed of iron girders and hollow bricks, and is thus fireproof.

No. 14.—*Chaplain.*

The Chaplain has an office and dressing room, &c., on the south side of the picture gallery, and adjoining the corridor of house for Legislative Council.

No. 15.—*Librarian's Residence.*

A residence for the librarian is shown, (though not required by the instructions, and, as in the case of the speaker's residence, it may be omitted without interfering with the other arrangements.) This residence may be placed either at the east or west side of the library if found desirable.

No. 16.—*Vaults.*

Strong vaults to be provided in some of the offices, and a suit is provided to the basement for general use, approached by a separate staircase, and having a lift, &c.

No. 17—*Post Office and Telegraph.*

Post Office and Telegraph Rooms are provided on south side of members' lobby.

No. 18.—*Messengers.*

Dwelling rooms for Messengers are provided in basement; and also for servants, in connection with the kitchen departments.

No. 19.—*Usher of the Black Rod and Sergeant at Arms.*

Residences are provided for the Usher of the Black Rod and Sergeant at Arms, (though not required by the instructions), and are so placed that they can be used for Committee Rooms and offices when required.

No. 20.—*Committee Rooms.*

The Committee Rooms are on first floor, and approached from the corridors by spacious staircases, well lighted, &c.

No. 21.—*Open Courts.*

In order to avoid dark and long passages, open Courts are provided for lighting the corridors, &c., and access is made to these on the basement floor, so that accumulation of snow is avoided.

Entrance to Kitchen.

The entrances to Kitchen and other Offices are on the east and west side, and separate, but attached kitchens are provided for each house.

No. 22.—*Warming and Ventilating.*

A space for warming apparatus is also provided, and the flues from them carried up to ventilating shafts provided for that purpose, by the four small towers at the north of the Houses.

No. 23. Water Closets.

Water Closets—urinals and lavatories—are provided in convenient situations for the use of the members and officers, and arrangements made so that danger of annoyance by the bursting of pipes from frost would be entirely avoided; and lift for coal, &c., are provided in the lobbies adjoining, for use of Messengers.

No. 24.—Water Tanks.

In the elevated portions of the east and west corners of the south front, and also in the four ventilating towers, tanks for water, of ample dimensions, are to be fixed and provision made for heating the chambers, so that all danger of freezing would be avoided.—These tanks would also be available in case of fire, as mains are proposed to be laid from them to the various corridors.

No. 25.—Windows

The windows, in every case are designed for double sashes, with ample space between each; and in this space it is proposed to place

Venetian Shutters,

So constructed as to slide into the walls when not required.

No. 27.—Construction of Roofs.

Great care has been taken in working out this design, to avoid all place on roofs where snow could accumulate. In this the designers have been greatly aided by the high pitched roof, peculiar to the Gothic style.

No. 28.—General Remarks.

In conclusion, the Architects beg to state that they have inspected the site for the proposed buildings, and by personal enquiries among the various Departments, have made themselves thoroughly conversant with the requirements, and flatter themselves that upon inspection this design will be found worthy of approval. But owing to the brief period allowed for the preparation of plans, they regret that they have not, by any possibility, been able to supply details of the various arrangements, and they feel that a written description must necessarily be too voluminous. They would, therefore, most respectfully suggest to the Board that the various architects, whose plans and general arrangements may be deemed most desirable, be allowed to attend upon the Board for the purpose of giving more detailed explanations. In the preparation of this design, the architects have endeavored faithfully to follow the instructions furnished by the Board, both as regards the requirements and the proposed outlay; and they beg respectfully to submit a tender from responsible parties, who can offer ample security, within the amount named.

This estimate of course only includes that portion of the building named by the Board to be included in the sum mentioned in the instructions.

Should the board honor us by adopting our design, we are prepared to forthwith finish the necessary working drawings, so that the foundations may be built this fall, and one of our firm would reside at Ottawa for the purpose of superintending the works.

No. 29. *Warming and Ventilating.*

The greatest attention has been given to the warming and ventilating of the Houses and offices, &c., in connection therewith, and the architects from their experience on this subject, in the erection of many important buildings in England and elsewhere, are able to guarantee that the system they propose would be most efficient.

In order to obtain a thorough ventilation it is absolutely necessary to provide an ample supply of pure air to be warmed in winter, and *vice versa* in summer; and to provide efficient means for abstracting the air as it becomes vitiated; for this purpose flues are provided of sufficient area according to the dimensions of the rooms, corridors, &c., both for the supply of pure air, and the extraction of the vitiated, and are so arranged that all inconvenience of draught would be avoided, and the supply be regulated according to the

requirements. But in a climate such as Canada, the method for winter and summer requires to be separately described.

All the windows having double sashes and the external entrances and lobbies having double doors, little or no egress for fresh air is to be relied on, in fact in order to thoroughly warm the buildings, it is necessary to guard against it.

No. 30.—*Warming, Winter.*

It is proposed to effect this by a sufficient number of apparatus for heating the air both by steam and hot water pipes, the apparatus being fixed in the most convenient situations, and the steam forced through the pipes by powerful engines.

The houses and rooms on the ground floor it is proposed to warm by fresh air admitted by shafts from the exterior into chambers in which the furnaces with coils of pipes, &c., are erected, and the air so heated will be moistened by jets of steam, or large, shallow tanks of water, so that the unpleasant effect of air heated by contact with hot metal will be avoided. It will thence be conducted by flues to the various appartments and the apparatus by which it is admitted will be provided with gauze wire, so as to distribute it and prevent draught, and also sliding valves, so that it may be regulated according to requirements. Flues for the extraction of vitiated air would be taken from each room (in area or number according to the cubical contents of the room,) and carried into a main flue which would be taken into the nearest ventilating tower or shaft; in this tower immediately above where the flues enter, a small furnace would be kept burning (or a sufficient number of gas jets would answer equally well) this, by rarifying the air would create a vacuum and cause the extraction of all the vitiated air from the rooms and thus enforce the entrance of the warm and pure air. In the house and corridors, the chamber between the ceilings and outside covering, would, when occupied, be kept heated by the gas jets and thus form an additional and most powerful extracting flue. It is proposed, in all cases, in order to avoid unpleasant draughts in the opening of doors, to thoroughly warm all the corridors and passages, in fact, without that being properly effected it would be impossible ever to obtain a thorough system.

No. 31.—*Summer ventilation.*

The pure air to be admitted from shafts as before specified, and cooled by means of fans about 5 feet diameter, driven by the engines and thence conducted to the rooms by flues provided for hot air. The system of the extracting flues would have to be kept up precisely in the same manner as specified for winter use, and by these means the whole of the buildings might be kept at a temperature considerably below that of the external air

No. 32.—*Open Fireplaces.*

But in addition to this fireplaces are provided for all rooms, and the sashes would all be made to open for summer use.

No. 33.—*Baths and Lavatories.*

The baths and lavatories would be supplied with warm water heated by furnaces, and all the water closets and urinals would have a chamber of hot air provided, in which the pipes would be taken to avoid danger of freezing.

The Architects trust that the foregoing description supplies sufficient information to give the board assurance that the subject is understood and will be properly treated.

No. 34.—*Fire Proof Construction.*

The Architects would strongly advise that the whole of the buildings should be made fire proof, which might be effected most thoroughly by the system now adopted in England and many parts of the continent, by the introduction of rolled or cast iron joists, (the former preferable) with solid concrete floors laid thereon, six inches in thickness and a surface finished in cement or wood, as may be best for the requirements by these means, (the roofs also being made fire proof) the fire would always be confined to the room in which it originated. The Architects have erected many buildings on this principle and are prepared to furnish all the details necessary. The system is much less costly and more effi-

cient than the use of brick arches supported by iron girders for the floors. The latter have been proved unsound in practise, as the fracture of one girder is sufficient to endanger the whole fabric. The cost of this system is about one and three quarters per cent in addition to the ordinary mode of construction.

No 35.—*Foundations.*

Whenever practicable, concrete to be used, formed of hydraulic lime, gravel, &c.

No. 36.—*Masonry and Brick Work.*

The walls to be faced with stone and lined with brick, and built hollow, or the architects would rather that the hollow bricks were used, all properly bonded and bedded and built in the most substantial and workmanlike manner.

No. 37.—*Drains.*

The drains to be constructed with glazed stoneware pipes, laid a sufficient depth under the surface to prevent danger of freezing, with all proper syphon traps, &c., complete.

No 38.—*Outside Facing of Walls.*

The walls to be placed as directed and all the dressed stone to be executed in the best manner, and properly dowelled, joggled or cramped together, as may be necessary.

No. 39.—*Inside Lining.*

The walls of corridors, houses, &c, to be lined with light coloured marble of the neighbourhood, or finished in parian cement, and decorated in colour &c.

No. 40.—*Floors.*

The floors of passages and corridors to be lined with ornamental tiles or marble in different colours. The wood floors to be of the best description and the joiners work generally to be executed in the most finished and workmanlike manner. The different kinds of native woods to be used as may be hereafter directed.

No. 41.—*Roofs.*

The roofs are shewn covered with slate, but the architects would strongly recommend the use of the galvanized and tinned iron. The architects used this material in the topics, where no other material but copper will last more than a few months. It has been on the roofs upwards of ten years and no visible decay or rust has occurred. By using the galvanized or tinned iron, all necessity for paint is avoided.

No. 42.—*Glazing.*

The glazing of the offices and dwelling rooms, of the speaker's rooms, &c, to be of patent plate glass. The houses, corridors, &c., to have stained glass of suitable patterns and devices.

The foregoing is a brief summary of the specification, which if furnished in detail would necessarily be too voluminous to attach to competition drawings. The architects would only further add, that they purpose, if honoured by the appointment to carry out the works in every respect in the most finished manner, avoiding superfluous ornament, but sufficiently embellished as becomes a building of such a class.

EXHIBIT, No. 63.

ESTIMATED COST OF CARRYING OUT THE BUILDINGS ACCORDING TO THE ACCOMPANYING PLANS AND SPECIFICATIONS.

Parliamentary Block, inclusive, three hundred and twenty thousand dollars...	$320,000 00
Departmental Buildings, inclusive, two hundred and twenty thousand dollars..	220,000 00
Governor General's Residence, complete, one hundred thousand dollars.....	100,000 00

We find, on making a calculation, that we can carry out the Departmental Buildings for a sum rather less than that named by the Commissioners; and that we require a little more for the Parliamentary Block, to meet the cost of decorating the Legislative Halls. The Governor General's Residence we will keep within the prescribed limit, viz.: one hundred thousand dollars; fitting it up replete with all the conveniences and modern improvements of an English gentleman's mansion.

July, 1859. "STAT NOMEN IN UMBRA."

NOTE, TO ACCOMPANY PLANS AND SPECIFICATIONS FOR PROPOSED PARLIAMENTARY BUILDINGS AT OTTAWA.

The design for the Governor's Residence is arranged for the site known as Major's Hill, in Ottawa; and by reversing the plan, it becomes equally adapted to the Sherwood Estate, without altering, in the slightest degree, its internal or external arrangements; or it may be applied, in its present form, to the Rockliffe Estate; and, with slight modifications, it may be adapted to any site which may be determined on.

Want of time has prevented some few additional drawings from being made, connected with each Department, and the same cause has prevented the plans submitted from receiving a high degree of finish; but each has received a considerable amount of careful study, and the internal arrangements are such, it is hoped, as to give satisfaction and ensure success. The classification of the rooms of the various Departments will be best made by the heads of Departments themselves. The specifications contain an outline of the leading portions of the various works; but a more detailed one must accompany the more detailed drawings which have to be prepared previous to the buildings being contracted for.

July, 1859. "STAT NOMEN IN UMBRA."

SPECIFICATION OF WORKS, &C., TO ACCOMPANY THE PLANS FOR PROPOSED PARLIAMENTARY BUILDINGS AT OTTAWA, C.W.

That portion of the site which is required for the basement is to be excavated to the required depth, and the remainder to be levelled off to a depth of four feet below the ground floor level.

Excavate also for drains, foundation walls, areas, air chambers, water-pipes, and otherwise; level up the ground for terraces, roads, etc., using the soil arising from the excavation. Any stone that may be quarried on the site will be used in building basement walls.

The whole of the basement and all external walls are to be built of the blue limestone of the district, the external walls to be hollow.

All the internal walls, and all casing of internal ones, to be of brick-work; the best hard brick to be used.

All window and door jambs, plinths, string courses, quoins, corbels, copings, finials, and other dressings, to be of sandstone from the district, or other suitable quarries.

The whole of the external facing of the library to be of sandstone, and the various strong rooms and rooms for records to be built of sandstone blocks, with firebrick casings, arched over and under with the same material, on iron girders, where required.

The main drain to be tubular, built of bricks, all subordinate drains of glazed socket pipes.

The large tower to be constructed with a reservoir on the top, to contain a supply of water for the requirements of the building, and for use in case of fire; the supply to be kept up by a steam engine, built in some suitable spot close to the tower, and having an iron main leading to the reservoir.

The system of heating and ventilation to be that now in general use in England, known as Haydn's patent, or, if preferred, a plan of more local character can be adopted, each room to be separately heated by a register, and ventilated by one or more of the most approved valvular gratings, and connecting with the main shaft in the centre of the building.

All joists required for the fireproof rooms are to be of Barrett's rolled iron, of suitable substance, pugged with three inches of mortar.

The library to be fitted up with iron staircases and galleries. Iron divisions to the recess, and iron book shelves, all prepared and arranged in the most modern and approved manner.

The floor of the library to be of tile paving laid on dry concrete.

Every portion of the building to be constructed with reference to its capability for resisting fire, all the doors to be thoroughly pugged; skirtings on all walls where flues occur, to be of cement; timber in similar position to be built on corbels; iron to be used in all cases where any danger can arise, and every other precaution taken to render the building as far as possible fireproof; plugs to be fixed in every convenient portion of the building, with hose attached for use in case of fire and otherwise. All timbers used in the building to be the best quality of lumber, and all workmanship to be unexceptionable.

The Legislative Council and Assembly Chamber are to be fitted up as shown by the drawings, having open roofs, decorated and otherwise embelished as indicated by the drawings. The end windows to be fitted with painted glass of approved designs; the side windows, throughout, with glass of mellow tints.

The principal staircase to be fitted up of oak or black walnut, the other staircases of pine. The floor of entrance and staircase hall to be laid with Menton's Encaustic Tiles in suitable designs.

Reporters' galleries in each Legislative Hall as shown on the plans.

All the joiner's work throughout to be executed in the best manner, of some approved hard wood.

The refreshment rooms and offices attached thereto, to be fitted with every convenience for the preparation and supply of refreshments, the wine cellar with bins of suitable capacity. Fit up the lavatories with marble slabs, and basins and closets with happed pans; the urinals with slate, trough and divisions; the apartment for the speaker to be fitted up with all requisite conveniences, those also for the servants resident in the building.

All the roofs to be covered with the best imported slate.

All valleys, flats, gutters, flashings or otherwise to be laid with melled lead of sufficient substance for its several uses.

Separate cisterns to supply the various closets and urinals, and lavatories, and for the domestic apartments of the servants.

Cast iron main supply to the reservoir; lead pipes for all minor supply and waste water.

Two sets of iron doors to each strong room, and iron shutters also to the windows of each.

All the walls and ceilings are to be plastered with good mortar, finished generally white with plaster of paris or other suitable material. Some portion of the rooms, including speaker's apartment, principal committee rooms, refreshment rooms, entrance halls, &c., will have cornices or other suitable decorations. All these various works are to be performed by first class mechanics, and to be of suitable designs.

The decoration of the two Legislative Chambers to be subject to future consideration and design, but to be commensurate with their dignity and importance.

All the painting, varnishing, or other finishing of the several portions of the building to be done with the best materials and in the most finished manner by workmen selected for the purpose.

The windows of each Legislative Chamber are to be fitted with painted glass, such subjects being selected as may hereafter be determined on, those windows on each side to be fitted with tinted glass of suitable designs. All other windows to have either plain or tinted glass according to the character of the rooms as may be selected hereafter.

SPECIFICATION OF WORKS, TO ACCOMPANY THE PLANS FOR PROPOSED DEPARMENTAL BUILDINGS AT OTTAWA, C.W.

Those portions of the two sites required for the basement, are to be excavated such depths as is necessary, and the remaining portions of the ground to be levelled off to an uniform depth of 4 feet below the ground floor level.

Excavate also for drains, foundation walls, areas, and chambers, and whatsoever else is required to complete the buildings.

Any stone which may be excavated, to be used in building the basement walls, all remaining rubbish and stone spaults are to be used in forming roads and walks about the buildings.

All the walls of the basement stories, and all external walls are to be built with same stone from the district, carefully selected, and bedded in good lime mortar. All external walls to be built hollow.

All the internal walls, arches of basement, trimmed arches to fire places, chimneys and all casing of external walls to be brickwork, the best hard burnt bricks being selected for the purpose.

Externally all string courses, windows and door jambs, quoins, corbels, chimney shafts, copings and other dressings are to be of sand stone from the district, or other suitable quarry, and all worked to a given design.

The various fire-proof strong rooms, throughout each building, are to be built of sand stone, and eased with fire bricks, arched over and under with the same material, each supplied with double iron doors, and the windows with double iron shutters. Care to be taken in forming the buildings fire proof as far as possible, and as the nature of the materials will allow, pugged floors, cement skirtings on walls where flues occur, joists built in corbels, and what other precautions can be adopted.

The principal drain to be of tubular form, built of bricks, all minor drains to be of glazed socket earthenware pipes, and the whole arranged so as to admit of being easily flushed with water.

The towers to be constructed to contain each a reservoir of water, supplied through iron pipes by the same engine which supplies the Parliamentary block, and to be connected with every part of the separate buildings by plugs, so as to flood the whole or any portion in case of fire.

The heating and ventilation proposed to be adopted is that now in general use in England, and known as Hadyns Patent, or any other arrangement may be used if preferred. Each room to be supplied with separate valvular gratings for the supply of pure air, and for the escape of the impure to the ventilating shafts.

Any joists that may be required for the fire-proof rooms are to be of patent rolled iron of suitable dimensions, and pugged with three inches of mortar.

All timbers used in the construction of the buildings are to be the best quality of timber, and all workmanship to be unexceptionable.

Joists of suitable dimensions for the several floors laid with 1½ inch grooved and tongued board, and pugged throughout with three inches of mortar.

The roofs to be constructed on the most approved principle with sufficient iron bolts and stays.

The principal staircase to be of oak or walnut, the remaining staircases of pine and all strongly framed and fixed.

The entrance hall of each building to be laid with mentons encaustic tile paving or other suitable paving which may be determined on.

All Joiners work to be framed in the best and strongest manner of oak or other hardwood.

Fit up the lavatories with marble slabs and wash basons, the closets with happed pans, and the urinals with slate troughs and devisions.

All the roofs to be covered with best imported slates.

All valleys, gutters, flats on roofs, flushings or otherwise, are to be laid with mulled lead of the necessary substance.

Separate cisterns lined with lead to supply each set of lavatories, closets &c., and for other use throughout the respective buildings.

All the walls and ceilings are to be plastered with three coats of mortar finished white. The finishing coat being of plaster of Paris or other suitable material. Cornices to be fixed to the entrance halls, and principal rooms of the several departments. The whole of the work to be executed in the best possible manner, by carefully selected workmen.

All the woodwork to be carefully painted, varnished, or otherwise finished as may be required. All the windows to be glazed with best British sheet glass and left perfect at completion.

NOTE.—The basement of these buildings to comprise living appartments for man servant in attendance. Spaces for the boilers for heating and ventilating. Store rooms for wood and coals, and for other general purposes.

EXHIBIT, No. 64.

(Copy.) OTTAWA, June, 1st, 1861.

SIR,—Having been authorized by the Commissioner to make such arrangements in reference to the Public Buildings in course of erection at this place as are necessary for the protection of the public interests, and having also received power to carry the same provisionally into effect, I have to request that you will take upon yourself the duties of a measurer of works upon the Departmental Buildings under the following instructions, and such further directions as you may hereafter receive from the architects of these building.

The pay attached to this office will be at the rate of eighty three and one-third dollars ($83⅓) per month, and will commence on this day. All these arrangements, however, are subject to the approval of the Commissioner.

It will be your duty, under the instructions you may from time to time receive from the architects, to make measurements and keep notes of all classes of work completed and in progress upon the Departmental Buildings and works connected therewith, to furnish the architects with fair copies of the same, retaining the originals in your own possession, to make up the quantities of the several kinds of work done during each month, and return them to the architects, to assist them in making up the estimates and entering them in the books provided for that purpose. As you will be held responsible for the correctness of these quantities, your signature must accompany all estimates transmitted to the Department for payment.

The architects, through their Clerks of Works, will point out to you the work done during the past month, and after you have measured and returned it to them, you will commence a thorough examination of all previous measurements with special reference to the first estimate, beginning at the foundations and satisfying yourself of the correctness of these measurements by sinking pits, if necessary, at different places along the walls as far as may be required to ascertain with accuracy the amount of work performed. From such observations you will check the returns for extra works in foundations and communicate the result to the architects.

As it will be impossible now to institute a similar check upon the quantity of excavation and masonry additional to the contract, in the main drains from the boiler houses and in the cold air ducts, you will carefully examine and verify as far as you can the notes, plans, sections and calculations of the same in the possession of the architects. You will, also, when called upon, give them the benefit of your opinion in regard to the fair value of such additional works as are not included in the contract, taking into consideration the circumstances under which they have been or may be performed. You will be careful to gather correct returns from the Clerks of Works of the daily force of laborers, teams, mechanics and foremen employed upon or about the building, and more especially upon any extra work that may be in progress under the written order of the architects, whether paid for by measurement or by day's work.

Separate returns of day's labour, both in contract or extra work, must be made to the architects at the end of every month.

The Clerks of Works will be instructed by the Architects to afford you all necessary

information and explanation in reference to previous measurements, and to assist you in making the future ones.

I have the honor to be, sir,
Your obedient servant,
SAMUEL KEEFER,
Deputy Commissioner Public Works.

Mr. John H. Pattison,
Measurer of Works, Departmental Buildings, Ottawa.

EXHIBIT, No. 65.

(Copy.) MEM.

Mr. Pattison, measurer to the works of the Departmental Buildings, will please forthwith proceed to make a general and comprehensive measurement of all work whatsoever done, and of materials provided for these Buildings up to 1st October, 1861. In doing this Mr. Pattison will be governed by the principles of measurement agreed on and hereinafter set forth, and he will carefully classify the work and materials under the following heads, viz:

1st. *Contract Work*,—that is to say, all work done and materials provided for work strictly coming under the original contract, wherein no deviation or additions have been made from or to the plans and specifications.

2nd. *Extras*,—that is to say, such work and materials provided for work coming under the head of contract work, but in which changes or additions have been made either in position, style of work, or class of material from that shewn or specified, viz:

1. Ohio stone and labor in angle and window quoins.
2. Rubbing cut stone.
3. Extra carving
4. Cutting bricks for jambs and arches.
5. Extra sized chimney shafts.
6. Nepean stone in templates and bond stones.
7. Blue stone of extra thickness in landings.
8. Masonry in main tower of east building.
9. Nepean stone facing and work in original contract.
10. Altered basement doors. Do. windows to 1st and 2nd floors.
11. Architraves and base blocks, &c., &c., &c.

3rd. *Additional Work*,—that is to say, all work, labor and materials not included in original plans and specifications.

Principles of measurement agreed upon by which the returns called for in the foregoing are to be governed and which are also to regulate future estimates, viz:

1st. Masonry to be measured solid, including cut stone and no openings under 10 feet wide to be deducted.

2nd. Nepean facing to be measured upon the whole of the external superficies of the walls of building.

3rd. Brickwork to be measured 20 bricks to the cubic foot, all flues per foot lineal and all splays and arched work per foot superficial in addition.

4th. Cut stone by English rules of measurement, that is to say: 1st, to be cubed to extreme dimensions before cutting. 2nd. Plain face labour to cover, in addition to the face, one bed and joint. 3rd. Sunk and moulded work to be measured in addition to the previous by girthing wherever it occurs.

(Signed,) HAMILTON H. KILLALY.

Ottawa, 30th Sept., 1861.

EXHIBIT, No. 66.

(Copy.) OTTAWA, 23rd October, 1861.

GENTLEMEN,—In looking over the mem. I handed you in reference to the mode and principles of measurement agreed on and upon which the instructions to the measurers were based, I fear the following items may not have been as explicitly stated as they should be.

1. Centreing to be measured on the soffit.
2. Air ducts in rubble masonry to be measured solid.
3. Cut stone in arches, sides of drains, air ducts and boiler house, measurement to include beds and joints.
4. In cut stone drains and air ducts and in brickwork openings to be deducted.

The prices fixed for the above classes of work respectively were governed by such mode of measurement.

Be so good as to inform the measurers accordingly.

I am, gentlemen, your obedient servant,
(Signed,) H. H. KILLALY.

Messrs. Stent & Laver.

EXHIBIT, No. 67.

(Copy.) QUEBEC, 26th March, 1862.

DEAR SIR,—I have directed the estimates for the Departmental Buildings to 1st Oct. also the second to 1st December, to be sent you in order that you may verify the measurements by your signature. When signed be so good as to send them to me by post to Toronto.

Yours truly,
(Signed,) H. H. KILLALY,

Mr. Pattison, Measurer Dept. Buildings, Ottawa.

EXHIBIT, No. 68.

(Copy.)

Hon. H. H. Killaly. OTTAWA, March 31, 1862.

DEAR SIR,—In accordance with your note of the 26th inst. I have signed the estimates to the 1st Oct. and the 1st Dec'r, respectively, which are sent herewith.

Mr. Clarke informs me it is your wish that I should send you a copy of the estimates previous to the 1st October. These I will get made and send to you in the course of a few days.

Your obedient servant,
(Signed,) J. H. PATTISON.

EXHIBIT, No. 69.

(Copy, No. 38,357. Subject No. 1,027.)

DEPARTMENT OF PUBLIC WORKS,
21st September, 1861

SIR,—I am directed by the Honorable the Commissioner to inform you that the Hon. Mr. Killaly has been directed to make a thorough investigation into and report upon the state and progress of the works at Ottawa, past and present, and upon all details whatsoever

connected therewith, with the view of determining the prices and modes of measurement to govern the settlement with the contractors. Mr. Killaly may be expected in Ottawa in the early part of next week. In the meantime you will exert yourself and endeavor to have all measurements of work and material closed up to the first of the present month. You will also afford Mr. Killaly in the course of his investigation every possible assistance and information he may require upon all matters connected therewith.

I am, sir, your obedient servant.

(Signed,) T. TRUDEAU.

Mr. J. H. Pattison,
Measurer of Works, Departmental Buildings, Ottawa.

EXHIBIT, No. 70.

$40,000. DEPARTMENT OF PUBLIC WORKS,
11th September, 1861.

(No. 7917.)

This is to certify that Thomas McGreevy, Contractor for Parliament Buildings, Ottawa, is entitled to the sum of forty thousand dollars, being on account of work performed and materials delivered. To be taken from the appropriation Public Buildings, Ottawa, 20 Vic., ch. 17, and to be accounted for.

(Signed,) JOSEPH CAUCHON,
Commissioner.

EXHIBIT, No. 71.

(No. 55141.)

COPY OF A REPORT of the Committee of the Honorable the Executive Council, approved by His Excellency the Governor General in Council on the 23d September, 1861.

On a memorandum dated 21st September, 1861, from the Honorable the Commissioner of Public Works, stating that the sum appropriated by the Legislature toward the Public Buildings at Ottawa is exhausted, and that with a view of putting those buildings in a state of security against the approaching season and meeting various necessary outlays, it is expedient that a further amount be advanced, and requesting authority to expend a further sum of one hundred thousand dollars over and above the appropriation above mentioned. The Committee concur in the Report of the Commissioner of Public Works, and submit the same for Your Excellency's approval.

Certified.

(Signed,) WM. H. LEE,
C. E. C.

The Honorable Commissioner Public Works.

EXHIBIT, No. 72.

$40,000. DEPARTMENT OF PUBLIC WORKS,
8th October, 1861.

(Copy No. 7999.)

This is to certify that Thomas McGreevy, Contractor for Parliament Buildings, Ottawa, is entitled to the sum of forty thousand dollars, being on account of his contract, authorized by Order in Council, dated 23rd ultimo, and to be accounted for.

(Signed,) JOSEPH CAUCHON,
Commissioner.

EXHIBIT, No. 73,

$10,000. DEPARTMENT OF PUBLIC WORKS,
19th October, 1861.

(Copy No. 8085.)
This is to certify that Thomas McGreevy, Contractor for Parliament Buildings, Ottawa, is entitled to the sum of ten thousand dollars, being on account of his contract, authorized by the Order in Council, dated 23rd ult., and to be accounted for.

(Signed,) JOSEPH CAUCHON,
Commissioner.

EXHIBIT, No. 74.

No. 56084.

COPY OF A REPORT of a Committee of the Honorable the Executive Council, approved of by His Excellency the Administrator in Council on the 19th November, 1861.

On the application of the Honorable the Commissioner of Public Works for the issue of an accountable warrant for $100,000 towards the Public Buildings at Ottawa,

The Committee recommend that an accountable warrant do issue accordingly for $100,000.

Certified,
(Signed,) W. H. LEE, C. E. C.

To the Hon. Commissioner of Public Works.

EXHIBIT, No. 75.

$45,000. DEPARTMENT OF PUBLIC WORKS,
20th November, 1861.

(Copy No. 8192.)
This is to certify that Thomas McGreevy, Contractor for Parliament Buildings, Ottawa, is entitled to the sum of forty-five thousand dollars, being on account of work performed. Authorized by Order in Council, dated 19th inst., and to be accounted for.

(Signed,) JOSEPH CAUCHON,
Commissioner.

EXHIBIT, No. 76.

$10,000. DEPARTMENT OF PUBLIC WORKS,
August, 1861.

(Copy No. 7749.)
This is to certify that Jones, Haycock & Co., Contractors for Departmental Buildings, Ottawa, are entitled to the sum of ten thousand dollars, being on account of work performed and materials delivered. To be taken from appropriation 20 Vic., ch. 17, and to be accounted for.

(Signed,) JOSEPH CAUCHON,
Commissioner.

EXHIBIT, No. 77.

$40,000. DEPARTMENT OF PUBLIC WORKS,
August 24th, 1861.

(Copy No. 7854.)
This is to certify that Jones, Haycock & Co., are entitled to the sum of forty thousand

dollars, being on account of work performed, Departmental Buildings, Ottawa. To be taken from the appropriation, Public Buildings, Ottawa, 20 Vic., ch. 17, and to be accounted for.

(Signed,) JOSEPH CAUCHON,
Commissioner.

EXHIBIT, No. 78.

$23,700. DEPARTMENT OF PUBLIC WORKS,
11th September, 1861

(Copy No. 7921.)

This is to certify that Jones, Haycock & Co., Contractors for Departmental Buildings, Ottawa, are entitled to the sum of twenty-three thousand seven hundred dollars, being for work performed and materials delivered. To be taken from appropriation for same, 20 Vic., ch. 17, and to be accounted for.

(Signed,) JOSEPH CAUCHON,
Commissioner

EXHIBIT No. 79.

$30,000. DEPARTMENT OF PUBLIC WORKS,.
9th October, 1861

(Copy No. 8000)

This is to certify that Jones, Haycock & Co., Contractors for Departmental Buildings, Ottawa, are entitled to the sum of Thirty Thousand Dollars, being on account of their contract. Authorized by Order in Council, dated 23rd ultimo, and to be accounted for.

(Signed,) JOSEPH CAUCHON,
Commissioner.

EXHIBIT, No. 80.

$10,000. DEPARTMENT OF PUBLIC WORKS,
28th October, 1861.

(Copy No. 8091.)

This is to certify that Jones, Haycock & Co., Contractors for Departmental Buildings, Ottawa, are entitled to the sum of ten thousand dollars, being on account of their contract. Authorized by Order in Council, dated 23rd ultimo, and to be accounted for.

(Signed,) JOSEPH CAUCHON,
Commissioner.

EXHIBIT, No. 81.

$45,000. DEPARTMENT OF PUBLIC WORKS,
20th Nov., 1861.

(Copy of No. 8,191.)

This is to certify, that Jones, Haycock & Co., contractors for Departmental buildings, Ottawa, are entitled to the sum of forty-five thousand dollars, being on account of work performed, authorized by Order in Council, dated 19th inst., and to be accounted for.

(Signed, JOSEPH CAUCHON,
Commmissioner.

EXHIBIT, No. 82.

$2,000. DEPARTMENT OF PUBLIC WORKS,
13th May, 1862.

(No. 8,831.)

This is to certify, that Jones, Haycock & Co., contractors for the Departmental buildings, Ottawa, are entitled to the sum of two thousand dollars, being on account of work performed. Authorized by Order in Council, Nov. 19, 1861, and to be accounted for.

(Signed,) JOSEPH CAUCHON,
Commissioner.

EXHIBIT, No. 83.

(Copy of No. 38352. Subject, 1025.)

QUEBEC, 21st Sept., 1861.

Memorandum.

The undersigned has the honor to state, for the information of Your Excellency in Council, that the sum appropriated by the Legislature towards the Public Buildings at Ottawa is exhausted, and that with a view of putting these Buildings into a state of security against the coming season, and meeting various necessary outlays, it is expedient that a further amount should be advanced.

The undersigned therefore requests that he may be authorized to expend a further sum of one hundred thousand dollars over and above the appropriation above mentioned.

Respectfully submitted.

(Signed,) JOSEPH CAUCHON,
Commissioner.

EXHIBIT, No. 84.

(Copy of No. 39199. Subject, 1025.)

QUEBEC, 18th Nov., 1861.

The undersigned begs to submit herewith a report upon the works of the Public Buildings in Ottawa, by Mr. Killaly, made after a careful investigation thereof by his direction. The undersigned will shortly have the honor to lay the whole subject fully before Council ; in the meantime he recommends that an accountable warrant issue in his favor to the amount of one hundred thousand dollars ($100,000.00,) to enable him to carry out the proposed arrangements with the contractors for an immediate suspension of these works, and to put them in funds to pay off the mechanics and laborers, as also to meet some current expenses connected therewith.

(Signed,) JOSEPH CAUHCON,
Commissioner.

EXHIBIT, No. 85.

(Copy of No. 37,737. Sub. 1025.)

QUEBEC, 3rd August, 1861.

PUBLIC BUILDINGS, OTTAWA.

Memorandum.

The undersigned, adverting to an order in Council, passed on the 15th May last, on a memorandum from the late Commissioner of Public Works, in reference to the works at the Departmental and Parliamentary Buildings at Ottawa, has the honor to submit that

this Order in Council interferes with his responsibility to your Excellency, and therefore requests that the said Order of the 15th of May, 1861, may be rescinded.

Respectfully submitted,

(Signed,) JOSEPH CAUCHON,
Commissioner.

EXHIBIT, No. 86.

OTTAWA, 30th September, 1861.

Hon. H. H. Killally,

SIR,—I am in receipt of orders from the Honorable the Commissioner of Public Works to suspend the work on the Parliament Buildings from the 1st October. These orders I will comply with, and would beg to say that the sudden stoppage will throw on my hands upwards of 800 men, who of course must be paid off. I would therefore request that you will inform the Department of Public Works that I shall require an immediate advance, of say sixty thousand dollars, to enable me to pay off my men and other pressing demands, as I cannot wait for the regular estimate.

I am, sir, yours respectfully,

(Signed,) THOS. MCGREEVY.

EXHIBIT No. 87.

(Copy of No. 55261.)

OTTAWA, 30th September, 1861.

SIR,—I have the honor to transmit herewith a letter I have just received from the contractor for the Parliamentary Buildings, demanding an immediate advance of 60,000 dollars. This demand I referred to the Architects for their opinion, and I also transmit their reply; likewise the opinion of the measurer, Mr. Bowes, on the same point, from all of which it appears that the contractor requires that sum to pay off the men now discharged, so as to enable them to disperse and proceed to their homes, and that the Department will be safe in making the advance.

The sum at which the maintenance of an establishment of artificers from this to the 1st March next to have prepared the cut stone, carpentry, &c., which will be required on the opening of the work in spring, is estimated by the architects and measurer at 50,000 dollars. As to the necessity of such establishment I beg to refer to my letter of this day, on the same subject, in the case of the Departmental Buildings.

I am, sir, your obedient servant,

(Signed,) H. H. KILLALLY.

T. Trudeau, Esq.,
Secretary Department Public Works.

ENDORSATION BY MR. KILLALY OF MCGREEVY'S LETTER.

Messrs. Fuller & Jones,

Be so good as to consider this application and let me know your opinion as to the safety of complying with it under the circumstances. You will please have Mr. Bowes' opinion on it also.

(Signed,) H. H. KILLALY.

30th September, 1861.

EXHIBIT, No. 88.

PARLIAMENT BUILDINGS,
OTTAWA, September 30, 1861.

To the Honorable H. H. Killaly,

We have the honor to acknowledge the receipt of your favor of this day, requesting our opinion respecting the application of Mr. McGreevy for the payment of sixty thousand dollars on account, to enable him to meet demands for work done up to date.

We had the honor this day to call your attention to the fact that progress estimates have been forwarded to the Department without any reference to us; but assuming that they are correct, we are of opinion that the sum of sixty thousand might safely be advanced to Mr. McGreevy.

We have the honor to be, sir, your obedient servants,
(Signed,) FULLER & JONES,
Architects.

EXHIBIT, No. 89.

PARLIAMENT BUILDINGS,
OTTAWA, September 30, 1861.

Hon. H. H. Killaly,

SIR,—With respect to the communication of Mr. McGreevy, contractor for the Parliament Buildings, asking for an advance of sixty thousand dollars to meet demands in consequence of the suspension of the works, I beg to state that the demand is reasonable, and therefore would recommend the advance to be made.

I have the honor to be, sir, your obedient servant,
(Signed,) JOHN BOWES,
Measurer.

EXHIBIT, No. 90.

OTTAWA, 30th September, 1861.

J. Trudeau, Esq., Sec'y., &c.,

SIR,—We beg to acknowledge receipt of your letter, of 27th instant, directing us to suspend work upon the Departmental Buildings at the end of the month; and in reply have to inform you that orders to that effect have been given, and that all mechanics, laborers, &c., will be discharged to-night.

We would represent that this stoppage, coming upon us so suddenly, will not allow us to wait the usual time for the estimate, and we would respectfully request that a sum of fifty thousand dollars be advanced us on work done, with as little delay as possible, in order that we may discharge our most pressing liabilities, for labor and material.

Yours, respectfully,
(Signed), JONES, HAYCOCK & Co.

EXHIBIT, No. 91.

30th September, 1861.

Messrs. Stent & Laver,

GENTLEMEN,—Be so good as to give me your views upon this matter, and to state whether it would be safe to comply with the requirements of the contractor.

Yours, &c.,
(Signed,) H. H. KILLALY.

EXHIBIT, No. 92.

Hon. H. H. Killaly,

SIR,—The sum of twenty-five thousand ($25,000) dollars may be advanced on account of Progress Estimate for the month of September; and a further sum of twenty-five thousand ($25,000) dollars on general account.

(Signed,) STENT & LAVER,
Architects.

September 30th, 1861.

EXHIBIT, No. 93.

(Copy No. 55,240.)

OTTAWA, 30th September, 1861.

SIR,—I have the honor to state, for the information of the Hon. the Commissioner that the whole of the works of the Public Buildings in this city will be fully stopped this evening. By this, about thirteen hundred men who must be paid off, (to enable them to proceed to their homes), will be thrown upon the hands of the contractors.

I enclose herewith a letter I have just received from Messrs. Jones, Haycock & Co., demanding that they may at once be paid on account of work generally the sum of fifty thousand dollars.

I have consulted with Messrs. Stent & Laver on this demand, and we are of opinion that that amount may be safely paid to the contractors, as will be shewn satisfactorily when those gentlemen prepare their general Estimate of all the work performed. I will, in conjunction with the architects, be prepared to report to the Commissioner in a day or two the nature, extent and cost of certain works which we consider it indispensably necessary to be done to guard the buildings from certain and great damages, if left exposed to the winter.

I am, sir, your obedient servant,
(Signed,) H. H. KILLALY.

T. Trudeau, Esquire.

EXHIBIT, No. 94.

EASTERN BLOCK.—WORKS WITHIN CONTRACT LIMITS.

No.	Quantity		Description	$ cts.
1	8497 0	yds. cube	Earth excavation to original footings	
2	344 0	" "	Rock "	
3	3509 0	" "	Rubble masonry to original footings	
4	3824 0	" "	" " above " "	
5	433, 20		Bricks laid lining walls	
6	215,000		" " internal walls unaltered	
7	25,349	cube feet.	Ohio stone built	
8	21,990	sup. "	Plain labor on do	
9	6,769	" "	Sunk "	
10	6,570	" "	Moulded "	734 00
11			Allowed on carving	
12	85	Tons	Iron joists laid	
13	No. 8		Vault doors prepared	
14	757,0	Feet lineal	Ornamental cresting prepared	
15	3724,0	lbs.	Ironwork partly prepared for terminals and safe doors	
16	11617,0		Iron roof straps and chimney straps, wro't and delivered	
17		Ft. B. M.	Pine timber and planks in roofs	
18	31,308	"	" " framed, (not fixed)	
19	3,708,0	Ft. sup	Centreing for arches	
20	100,0	Feet lin'l	12 pipe drain	
21	216,0	"	9 " "	
22	53050,0	Ft, B. M.	Lumber roughed out for joiners' work	
23			Nepean rubble in safes for fire bricks	

EXTRA WORK.

No.	Quantity.		Description.	$	cts.
1	2144,0	ft. cube	Ohio stone in quoins (limestone deducted)		
2			Ohio, Brockville or Potsdam stone, sandstone deducted.		
3	6757,3	sup.	Plain labor on sandstone		
4			" " circular		
5			Sunk face "		
6			Moulded " straight		
7			" " circular		
8			Chamfered face, straight		
9			Rubbed "		
10	267,0	yds cube	Rubble Masonry		
11	57380,0		Bricks laid		
12			Splays and soffits		
13	53427,6	ft. sup.	Nepean facing to contract work		
14	6620,0		Nepean stones in bond stones, deducting limestone		
15	2000,0		" " templates deducting value of limestone.		
16	1471	cube yds	Rubble masonry in main tower		
17			Rolled iron joists		
18		sup.	Increased value of basement doors		
19		each.	Ground floor windows "		
20		"	First " " "		
21			Base blocks		
22		lineal	Architrave mouldings		

ADDITIONAL WORKS.

No.	Quantity.		Description.	$	cts.
1	2213'0	Yds. cube	Earth excavation below original footings		
2	2014,0	"	Hard pan " " "		
3	5493,0	"	Filling from spoil bank, including ramming		
4	1704,0	"	Rock excavation below original footing to 5 feet		
5	456,0	"	" 10 "		
6	1223,0	"	Earth excavation drains and ducts		
7	410,0	"	Hard pan "		
8	1769,25	"	Rock " " to 5 feet		
9	1495,13½	"	" " " 10 "		
10	1477,21	"	" " " 15 "		
11	1031,08	"	" " " 20 "		
12	620	"	" " " 25 "		
13	276,19	"	" " " 30 "		
14	5646,0	"	Rubble masonry in walls		
15	1742,0	"	" " in boiler house		
16	4708,0	Ft. sup.	Cut ashlar face to "		
17	1834,0	"	" arches through walls		
18	6299,0	"	Centreing doors, windows. &c.		
19	1597,0	Yds cube	Masonry main and branch sewers ; outlets to do. 138 yds		
20	2089,0	sup. feet	Cut ashlar sides to sewers		
21	3366,0	"	Cut arches and inverts		
22	1368,0	cubd yards	Masonry in air ducts		
23			NOTE.—Outlets to " 536 cube yds		
24	4067,0	sup. feet	Scappled arches to "		
25	1603,0	"	Cut ashlar sides built		
26			Chamfered "		
27			Rubbed "		
28			Carving		
29	15 tons		Rolled iron joists	209	88
30			Riveted girders		
31			Iron in roof straps and bolts		
32			Roof timbers and plank in work.		
33		squares	Slating		
34		lbs	Of lead in gutters, &c.		
35	2658	"	Iron bars, doors, &c. to chimneys		
36	11126,0	sup ft.	Nepean facing		
37	30,0		Blue stone lintels to warm air flues		

No.	Quality.		Description.	$ Cts.
38			Stove pipe rings	
39	12253,0	sup. ft.	Cut ashlar prepared, not built	
40	750,0	"	Arches built	
41	1083,0	"	" prepared	
42	4804,0	"	Nepean paving to floors and ducts	
43	2807,0	"	Centreing to drains and ducts	
44	99,0	yd. cube	Concrete floors of air ducts, &c	
45	1,445,894		Bricks in internal walls above ground floor where altered,	
46			hot air flues, &c	
47	148,020		Bricks in internal walls, above in extension	
48	349,467		Internal walls and hot air flues below ground floor	
49	No. 328		Barrels of cement for building ducts, &c	
50	4736,0	sup. ft.	Centering hot air vaults	
51	256,0	cube ft.	Gloucester stone branch drain	
52	159,0	ft. supt	Circular dish bouchard labor	
53	205,0	"	Nepean covering flags	
54	128,0	ft. lineal	15 inch drain pipes	
55	123,0	"	9 " "	
56	156,0	"	4 " "	
57			No. 5 9 inch and No. 7 4 in traps	
58	2754,0	ft. cube	Ohio, Brockville and Potsdam stone	
59	6909,0	ft. sup.	Plain labor on straight face	
60		"	Circular " "	
61	164,0	"	Sunk " straight	
62		"	" " circular	
63	140,0	"	Moulded " straight	
64	223,0	"	" " circular	

EASTERN BLOCK.—RAW MATERIALS ON WORKS.

65	10,211,0	cube ft.	Ohio, Brockville, Potsdam and blue stone	
66	990,0	sup. ft.	Nepean facing	
67	104,0	ft. cube	Nepean steps	
68	225,0	"	Gloucester stone	
69	20,0	Toise.	Rubble limestone, (per toise of 216 feet)	
70	420,0	squares.	Slates	
71	406,0	ft. sup.	Nepean flags	
72	87,163		Bricks	
73	2000	bushels	Lime	
74	2363	cube yds.	Drift sand for plastering	
75	200	M.	Laths	
76	52	M.	Common lumber	
77	160	M.	Clear. "	
78	15	M.	Oak "	
79	2150	lbs.	Sheet lead	
80	17000	"	Iron in bars, rods, &c	
81	130,0	lineal feet.	Drain pipes, 6 inch	
82	60,0	"	" 12 "	

EXHIBIT, No. 95.

WESTERN BLOCK.—WORKS WITHIN CONTRACT LIMITS.

No.	Quantity.		Description.	$ Cts.
1	2771 0	Cube yds.	Earth excavation to original footings	
2	1072 0	" "	Rock do	
3	3472 0	" "	Rubble masonry below ground floor line	
4	3043 0	" "	do do above ground floor line	
5	682,800		Bricks laid lining outer walls	
6	189,680		do internal walls unaltered	
7	17,970		do laid below ground floor line	
8	14,784	Cube feet.	Ohio stone built	
9	15,945	Sup. "	Plain labor on do	
10	2,520	" "	Sunk face	
11	1,474	" "	Moulded do straight	
12			Carving allowed	462 00
13	90		Tons iron joists laid	
14	No. 8		Vault doors and frames prepared	
15	757 0	Lin. feet.	Iron cresting	
16	3724	Lbs.	Iron work partly prepared for terminals, safe doors, &c.	
17	4762 0	"	Iron roof straps, &c., wrought and delivered	
18		B. M.	Pine timber and plank on roofs	
19		"	do do framed but not fixed	
20	2321 0	Sup. feet.	Centreing for arches	
21	146 0	Lin. feet.	9 inch drain pipe laid	
22	No. 2		Syphon traps	
23	53,050	B. M.	Lumber roughed out for joiner's work	
24	224	Yds cube.	Nepean rubble in safes for fire brick	
25	1137 0	Feet sup.	Circular moulded	

EXTRA WORK.

1	2706 0	Cube feet.	Ohio stone in quoins, limestone deducted	
2			Ohio, Brockville or Potsdam stone, sandstone deducted	
3	9227 0	Sup. feet.	Plain labor on sandstone	
4			Circular do do	
5			Sunk face straight	
6			do do circular	
7			Moulded face straight	
8			do do circular	
9	22 6		Chamfer'd do	
10			Rubbed do	
11			Rubble masonry	
12			Bricks laid	
13	181 8	Feet sup.	Splayed jambs, &c., to brick-work	
14	54668 10	" "	Nepean facing to contract work	
15	6500 0	Cube feet.	Do stone in bond stones, deducting limestone	
16	1800 0	Feet sup.	Nepean flags in templates, deducting limestone	
17			Rolled iron joists	
18		1895	Rivetted girders	
19		2240	Increased value of basement doors	
20			do do ground floor windows	
21			do do first floor windows	
22			do do base blocks	
23			do do architrave mouldings	

ADDITIONAL WORKS.

1	1537 0	Cube yds.	Earth excavation below original footings	
2	2500 0	" "	Hard pan and boulders	
3	3189 0	" "	Filling from spoil bank including ramming	
4	2045 0	" "	Rock excavation below original footings to 5 feet	
5	3155 0	" "	do do do 10 feet	
6	3761 0	" "	do do do 15 feet	
7	1587 0	" "	do do do 20 feet	
8	72 0	" "	do do do 25 feet	

No.	Quality.		Description.	$ Cts.
9	178 0	" "	Earth excavation to drains and air ducts	
10	404 0	" "	Hard pan do do do	
11	1574 ¾	" "	Rock do do do do 5 feet	
12	1357 ½	" "	do do do do do 10 feet	
13	2330	" "	do do do do do 15 feet	
14	1231	" "	do do do do do 20 feet	
15	951	" "	do do do do do 25 feet	
16	160	" "	do do do do do 30 feet	
17	2448	" "	Rubble masonry in walls below ground floor line	
18	707	" "	do do do above do do	
19	960	" "	Block stone in boiler house	
20	3931 0	Feet sup.	Cut ashlar face to do	
21	831 0	" "	Cut arches through walls	
22	2966 0	" "	Centreing doors and windows	
23	1604 0	Cube yds.	Masonry in main sewer	
24	1840 0	Feet sup.	Cut ashlar sides to do	
25	3312 0	" "	Arches and inverts to do	
26	2492 0	Cube yds.	Masonry in air ducts (outs to same 368 20-27)	462 00
27	5564 0	Feet sup.	Scabbled arches to do	
28	4900 0	" "	Cut ashlar sides to do. built	
29	6584 0	" "	do do prepared	
30	982 0	" "	Arches to do built	
31	332 0	" "	do do prepared	
32	No. 580	" "	Barrels of cement used in building these	
33	14	Cube yds.	Concrete to floors of ducts	
34	6897 0	Feet sup.	Nepean paving floors of do	
35	9338 0	" "	Centreing to drains, air ducts, and smoke flues	
36	1,252,960		Bricks in walls above ground floor	
37	209,000		do in additions	
38	212,050		do below ground floor	
39	907 6	Sup. feet.	Splays, arch, soffits, &c., &c	
40			Centreing hot air vaults	
41	7394 0	" "	Nepean facing	
42	634 7	Cube feet.	Ohio stone in quoins	
43	2135 0		Plain labor on do straight	
44			do do circular	
45			Sunk do do straight	
46			do do circular	
47			Moulded do straight	
48			do do circular	
49			Gothic moulded straight	
50			do do circular	
51			Chamferd do	
52			Rubbed do	
53	528 ½	Lbs.	Ornamental iron work in stancheon bars, &c	
54	10	Tons.	Rolled iron joists	
55	1300	Lbs.	Iron straps, bolts, &c	
56			Roof timbers and plank built	
57	260 0	Cube feet.	Nepean stone steps	

RAW MATERIALS DELIVERED.

1	9298 0	Cube feet.	Ohio, Brockville, Potsdam, and blue stone on works	
2	1534 0	Sup. feet.	Nepean facing	
3	60	Toise.	Rubble limestone (toise of 116 feet)	
4	340	Squares.	Slates on hand	
5	1050	Sup. feet.	Nepean flags	
6	122,402		Bricks delivered	
7	2150	Bus.	Lime do	
8	1860	Cube yds.	Drift sand for plastering	
9	200 M		Laths	
10	52 M	B. M.	Common lumber	
11	159,147		Clear do	
12	15,180		Oak do	
13	2150	Lbs.	Sheet lead	
14	17,522	"	Iron at forge	
15	130	Feet lin.	6 inch drain pipes	
16	58	" "	12 inch do do	

EXHIBIT, No. 96.

ESTIMATE of the quantities of brickwork required to build the several walls of the Departmental Buildings, according to the contract drawings, prepared by Messrs. Stent & Laver, Architects; this Estimate being prepared with the view of ascertaining the amount to be deducted from the estimated value of the work as executed.

EASTERN BLOCK.

Number of bricks required	1,172,360	
Deduct quantity measured and returned for walls, where no alterations have been made	215,000	
		957,360

WESTERN BLOCK.

Number of bricks required	942,740	
Deduct quantity measured and returned for walls, where no alterations have been made	189,680	
		753,060
Total quantity		1,710,420

(Signed,) J. H. PATTISON,
Measurer of Works.

Government Buildings,
Ottawa, Oct. 21, 1861.

EXHIBIT, No. 97.

TABLE exhibiting the difference in value of all such items of cut stonework as has been replaced by other, differing in character, or omitted by the extension of the east wing of the Eastern Block, the west wing of the Western Block, the altered position and extension of boiler house, boiler house chimnies, and other similar causes.

	Quantities.		As Deducted at Contract Prices.		If Deducted from Additional Quantities, or at Additional Rates.	
	Feet.	in.	Rate. $ cts.	$ cts.	Rate. $ cts.	$ cts.
Eastern Block.						
Plain face, including stone	14638	11	a 0 42	6148 35	a 1 25	18298 65
Sunk and chamfered work	5261	10	a 0 16	841 89	a 0 52	2736 15
Moulded	348	8	a 0 20	69 73	a 0 52	181 30
Gothic moulded	290	8	a 0 20	58 13	a 1 00	290 66
Circular face	245	7	a 0 25	61 39	a 0 50	122 79
" sunk	680	10	a 0 25	170 20	a 0 64	435 73
" chamfer	1189	9	a 0 25	297 43	a 0 90	1070 10
" moulded	220	6	a 0 25	55 12	a 0 90	198 45
" gothic moulded	302	2	a 0 25	75 54	a 1 50	453 25
						23787 08
						7777 78
						16009 30
Difference						
Western Block.						
Plain face, including stone	12096	7	a 0 42	5080 56	a 1 25	15120 14
Sunk and chamfered work	4456	1	a 0 16	712 97	a 0 52	2317 16
Moulded	249	0	a 0 20	49 80	a 0 52	129 48
Gothic moulded	20	9	a 0 20	5 95	a 1 00	29 75
Circular, face	162	5	a 0 25	40 60	a 0 50	81 21
" sunk	281	6	a 0 25	70 37	a 0 64	180 16
" chamfer	392	4	a 0 25	98 08	a 0 90	353 10
" moulded	87	0	a 0 25	21 75	a 0 90	78 30
" gothic moulded	401	9	a 0 25	100 43	a 1 50	602 62
						18891 92
						6180 51
						12711 41
Difference						
Total difference on both blocks						28720 71

EXHIBIT, No. 98.

(Copy.)

Messrs. Stent & Laver, OTTAWA, 22nd Oct., 1861.

GENTLEMEN,—Mr. Pattison will hand you his approximate measurement of work done and of material delivered, which appears to me to be very creditably and carefully made out.

There are a few items, I think, not exactly in the shape they are in the contractors' schedules of claims.

I think it would be very desirable if you would look Mr. Pattison's return over with him, and then proceed to close the Estimate on the quantities and rates agreed on. In doing so, it would be wise to have the contractors present.

Faithfully yours,
(Signed), H. H. KILLALY.

EXHIBIT, No. 99.

(Copy of 38,353. Sub. 1,026.)

QUEBEC, 21st Sept., 1861.

GENTLEMEN,—I am directed by the Hon. the Commissioner to inform you that the Honorable Mr. Killaly has been directed to make a thorough investigation into and report upon the state and progress of the Works at Ottawa, past and present, and upon all details whatsoever connected therewith with a view of determining the prices and the mode of measurement to govern the settlement with the contractors. Mr. Killaly may be expected in Ottawa in the early part of next week; * *in the meantime you will exert yourselves, and endeavor to have all measurements, of work and material, closed up to the 1st of the present month.* You will also afford Mr. Killaly, in the course of his investigation, every possible assistance and information he may require upon all matter connected therewith.

(Signed,) T. TRUDEAU,
Secretary.

Messrs. Fuller & Jones, Architects,
Ottawa, C. W.

* [NOTE.—The portion in *Italic* was struck out of the letters to Messrs. Fuller & Jones, and Stent & Laver, but retained in all the rest.]

EXHIBIT, No. 100.

(Copy.) OTTAWA, 30th September, 1861.

SIR,—As it is of the greatest importance that the full measurements of all the works of the Parliament buildings executed up to the 1st October next, be made ready by the same time as those of the Departmental buildings, I have to request that you will at once proceed to make them. In doing so, you will be governed by the following principles in classifying the works:—

1st. *Contract work.*—That is to say, all work done and materials provided for work strictly coming under the original contract, and wherein no deviations or additions have been made from or to the plans and specifications.

2nd. *Extras.*—That is to say, such work, and materials provided for work, coming under the head of contract work, but in which changes or additions have been made, either in the position, style of work, or class of materials from that shown or specified

3rd. *Additional work.*—That is to say, all work, labor and materials not included in original plan and specification.

(Signed,) HAMILTON H. KILLALY.

Mr. John Bowes,
Measurer of Works of the Parliament Buildings, Ottawa.

The principles of measurement agreed to and decided on, after full consideration, for work of the Departmental buildings, are those which of course must govern the measurement of works of the Parliamentary buildings; and they are as follows:—

1st. Masonry to be measured solid, including cut stone, and no openings under 10 feet wide to be deducted.

2nd. Napean facing to be measured upon the whole of the external superfices of the walls of the building.

3rd. Brick-work to be measured 20 bricks to the cubic foot; all flues per foot lineal; and all splayed and arched work per foot superficial, in addition.

4th. Cut stone, by English rule of measurement,—that is to say:

1st. To be cubed to external dimensions before cutting.

2nd. Plain face labor to cover, in addition to the face, one bed and joint.

3rd. Sunk and moulded work to be measured in addition to the previous, by girthing, wherever it occurs.

(Signed,) H. H. KILLALY,

As the works are now stopped, I have requested Mr. Larose to unite with and aid you in making up the measurements.

I am, sir, your obedient servant,

(Signed,) H. H. KILLALY.

EXHIBIT, No. 101.

(Copy.) OTTAWA, 24th October, 1861.

DEAR SIR,—I enclose you a schedule showing the rates agreed on for the additional works performed by the contractor of the Parliament building. You will be guided by it in making up your return.

The rates for material delivered you will regulate in due proportion to the prices of the work for which they are provided,—fixing those of material for contract work according to contract prices, and for additional work by the rates in the Schedule.

I am, yours truly,

(Signed,) H. H. KILLALY.

To Mr. John Bowes.

EXHIBIT, No. 102.

List of Prices claimed by Mr. Thomas McGreevy, on Additional Works.

No.	Denomination.	DESCRIPTION.	Allowed in Progress Estimates.	Claimed.	Allowed
			$ cts.	$ cts.	$ cts.
1	℔ cubic yards.	Rock excavation in building, to 5 ft. deep.....	1 20	2 25	2 00
2	do	do extra depths, for heating and ventilating, 5 to 10 ft. deep	1 90	3 60	3 00
3	do	do do do 10 to 15 ft. deep.	2 25	5 10	4 25
4	do	do do do 15 to 20 ft. deep.	.....	6 00	6 00
5	do	Rock excavation in ducts and drains for heating and ventilating, to 5 ft. deep.....	1 90	3 25	2 00
6	do	do do do 5 to 10 ft. deep.	2 25	4 50	3 00
7	do	do do do 10 to 15 ft. deep.	3 50	8 00	4 25
8	do	do do do 15 to 20 ft. deep.	5 10	9 00	6 00
9	do	Earth excavation, extra depth, to reach rock..	0 40	0 75	0 55
10	do	Filling to walls, levelling and ramming	0 35	0 80	0 75
11	do	Masonry in angle towers, additional foundations, thickening to walls in boiler house, &c.	4 00	7 50	6 50
12	℔ ft. sup'l.	Picked face work in ducts and drains.....	0 41	0 85	0 41
13	do	do do boiler house.....	0 90		0 41
14	do	Picked face in arches to ducts..	1 25 to 1 75	1 75	1 50
15	do	do to drains			
16	℔ mille.	Brick work in walls.....	13 50	16 10	13 80
17	℔ ft. sup'l.	Arches, sigmental and circular.....	.....	0 20	0 20
18	℔ ft. lineal.	Flues	0 07	0 12½	0 25
19	℔ ft. sup'l.	Nepean facing	0 21	0 55	0 50
20	do	Flagging, 3-ins. and under.....	7c. to 38c.	0 45	0 25
21	do	do 3 ins. to 6-ins.....	7c. to 38c.	0 45	0 30
22	.....	do over 6-ins. to be measured as block.	.....	.....	.....
23	do	Potsdam stone in relieving arches	.....	0 90	0 90
24	℔ ft. cubic.	Ohio stone	0 75	1 40	1 25
25	do	Nepean stone.....	.....	1 40	1 25
26	℔ ft. sup'l.	Plain face on Ohio stone.....	0 28	0 45	0 40
27	do	Sunk do do	0 42	0 75	0 60
28	do	Circular do do	0 56	0 90	0 64
29	do	Moulded and sunk work, Ohio stone	0 40	0 65	0 60
30	do	do do circular	0 62	1 00	0 90
31	do	Mitres, allow a foot for each—price according to classification	.....	.....	.....
32	℔ ft. cubic.	Brockville stone	0 50	0 80	0 80
33	℔ ft. sup'l.	Labour on do 50 per cent more than Ohio..	.....	.....	.....
34	℔ ft. cubic.	Blue sandstone, for steps and landings.....	.....	1 40	1 25
35	℔ yd. sup'l.	Concrete in bottom of drain and ducts, (1 foot thick	.....	2 00	2 00
36	do	do for floors.....	.....	3 00	3 00
37	℔ ton.	Rolled iron joists.....	.....	160 00	140 00
38	do	Rivetted plate girder.....	.....	240 00	220 00
39	℔ ft. cubic.	Marble	.....	2 50	2 00
40	℔ ft. sup'l.	Labour on do plain face	.....	3 00	2 50
41	do	do do do circular	.....	3 75	3 50
42	do	Centuring measuring all arch	0 20	0 35	0 20
43	℔ lb.	Ornamental iron work, in cresting and terminals.....	.....	.....	0 50
44	℔ ft. sup'l.	Doors, (additional), on basement floor	.....	.....	0 70
45	do	do do above basement.....	.....	.....	0 75
46	each.	Additional windows in basement of angle towers, sashes and frames complete, not glazed	.....	.....	12 50
47	do	Additional windows in other parts basement, large windows with double sashes.....	.....	.....	20 00
		Carried over.....	.....	.....	.....

Exhibit, No. 102.—List of Prices claimed by Mr. Thomas McGreevy, on Additional Work.—(*Continued,*)

No.	Denomination.	DESCRIPTION.	Allowed in Progress Estimates.	Claimed.	Allowed.
			$ cts.	$ cts.	$ cts.
		Brought forward			
48	each.	Additional windows on ground and first floor, (none)			
49	do	Altered do do (none)			
50	℔ ft. sup'l.	Architraves, 6-in. ⋈ 2-in. with 2½-in. roll basement			0 20
51	℔ square.	2-in. white pine flooring laid, including strips in concrete			7 50
52	do	1½ do do do			5 75
53	℔ lb.	Plumber, (lead work)			0 25
54	℔ square.	Slating, including copper nails and battens			11 50
55	℔ lb.	Iron bolts and straps fixed			0 15
56	℔ M. B. M.	Labour and timber in roofs, (concealed), framed			30 00
57	℔ yd. sup'l.	Plastering, best class, hard finish			0 40
58		Oak, wrought and fixed, (not settled)			
59		Pine, do do			
60	℔ ft. sup'l.	Cement moulded skirtings, including mitres			0 56
61	do	Plain plaster cornice			0 30
62	℔ lb.	Ornamental cast iron			0 08
63	℔ yd. sup'l.	Painting 4 coats in oil			0 30
64	do	External iron work in picked colours			0 40
65	do	Asphaltum staining, 2 coats			0 18
66	do	Oak graining			0 35
67	℔ inch sup'l.	Gilding			0 04
68	℔ ft. sup'l.	Cement floors, 1½-ins			
69		Extra labour on sandstone quoins			0 15
70		Alterations in saloons, to be settled by deducting work not done at schedule prices, allowing the extra rate for work substituted	to be settled	by measurer.	
71		Claim for cut stone in piers and basement. The Architects admit this as far as under the houses below contract level, quantities to be ascertained and entered as similar work.	do	do	
72		Claim for 7 iron built girders, to carry walls and required when the additional fire-proofing was adopted, ascertain weight and rate as similar work, £55 ℔ ton	do	do	
73		Claim for extra labour on Brockville stone in windows of basement, plinth, &c. The stone was procured by contractors, considering it cheapest, finding the difficulty of working it they abandoned it—no allowance.			
74		Claim for difference between oak and pine sills to all sashes throughout the building, settled by assuming oak and workmanship at 85 cts. ℔ superficial foot, and deduct value of pine sills	to be settled	by measurer.	
		Total			

(Signed,) H. H. Killaly.

23rd October, 1861.

EXHIBIT, No. 103.

(Copy.) QUEBEC, 14th August, 1861.

SIR,—With reference to the measurement of work done and materials delivered, at the Parliament Buildings, Ottawa, I am directed by the Honorable the Commissioner to state that, inasmuch as the parties tendering were not informed what system or usage of measurement would be followed in reference to these Buildings, the contractors must naturally have presumed that they were to adopt the mode of measurement in usage in the locality where the Buildings were to be erected, and without doubt have based their calculations on the mode referred to.

I am therefore directed to instruct you to measure the work done and to be done, and the material delivered, for the Buildings you are now engaged upon, according to the usages and customs in force in Ottawa.

I am further to request you to take special care, with regard to the contract work, that the pro rata rates in the Progress Estimates are in fair proportion to the bulk sum named in the contract.

I have also to instruct you to transmit, in future, the Estimates direct to this office as soon as they are prepared.

I am, sir, your obedient servant,

T. TRUDEAU,
Secretary.

John Bowes, Esquire,
Measurer of Public Buildings, Ottawa.

EXHIBIT, No. 104.

PARLIAMENT BUILDINGS, OTTAWA.

VALUE OF WORK.

Earth excavation to 5 feet deep, including leveling, per yard cube	$1 25
Do mixed with boulders, per yard cube	0 50
Frozen earth to 2 feet deep, per yard cube	0 75
Rock Excavation to 5 feet deep, within area of building, per yard cube	1 25
" " between 5 feet and 10 feet deep, within area of building, per yard cube	1 75
" " " 10 feet and 15 feet deep, " " " "	2 25
" " to 5 feet deep in ducts and sewer, per yard cube	1 50
" " between 5 feet and 10 feet deep in ducts and sewer, per yard cube	2 15
" " between 10 feet and 15 feet deep, in ducts and sewer, per yard cube	2 80
" " between 15 feet and 20 feet deep, in ducts and sewer, per yard cube	3 45
Stone taken out of excavations to valued 40c. per cubic yard	
Filling brought a distance of 500 yards, levelled outside of building, per yard cube	0 30
" " " " " " inside of building, per yard cube	0 35
Rubble stone delivered, per toise 216 feet	5 50
Rubble masonry, including materials and labor in foundations and ducts, per toise 54 feet	4 40
Rubble masonry, from basement floor line to main cornice, per toise 54 feet	5 26
And when outside scaffolding was used, 44 cents in addition.	
Rubble masonry, for every additional height of 10 feet above main cornice	
Add $1.50 per toise to the above.	
Brick laid as lining to external walls, per M	12 75
Brick laid in internal walls, per M	12 25
Picked dressed limestone in sides of ducts having 12-inch beds, including the skewback, labor, per foot super	0 17
Stone for ditto, per foot cube	0 17
Picked dressed limestone in arches of ducts, labor, per foot super	0 35
Stone for ditto, per foot cube	0 20
Picked dressed stone in arches of main sewer, labor, per foot super	0 50
Stone for ditto, per foot cube	0 20
Picked dressed stone in boiler-house, labor, per foot super	0 25
Stone for ditto, per foot cube	0 20
Fine-picked or toothed native sand-stone quoins, labor, per foot super	0 25

Rough-picked native sandstone quoins, labor, per foot super	0 20
Napean stone in block, for quoins to steps, per foot cube	0 30
Napean stone facing, extra, over limestone, per foot super	0 10
Extra Napean relieving arches, per foot super	0 06
Plain work Ohio stone, measuring only that which is seen, per foot super	0 20
" " circular, per foot super	0 30
Sunk work, per foot super	0 30
" circular, per foot super	0 40
Moulded work, per foot super	0 45
" circular, per foot super	0 60
Chamfers, per foot super	0 30
Moulded steps in chamfers, each	0 30
" " paneled, each	0 50
Carving in Ohio stone, labor, per foot super	1 50
Plain work Arnprior marble, polished and setting, labor, per foot super	1 50
" " circular polished, labor, per foot super	2 50
Sunk work, " " " " "	2 50
" " circular polished, labor, per foot super	3 30
Moulded " polished, labor, per foot super	3 15
Moulded circular Arnprior marble, polished, labor, per foot super	4 87
Work in Brockville stone, labor 50 per cent more than Ohio, per foot super	
Napean flagging, 6-inch thick, averaging 12 feet super, per foot sup	0 30
" 4-inch thick, " 4 feet, per foot super	0 13
" 3-inch thick, " 3 feet, per foot super	0 09
" 2 inches and under, for joists, per foot super	0 06
Rough concrete in ducts, per yard cube	1 25
Picked dressed beds and joints in foundation of Library, per foot super	0 08
Picked " piers under Legislative Halls, extra upon contract, per foot super	0 05
Potsdam stone in relieving arches, per foot super	0 40
Rivetted plate girders, per ton	190 00
Rolled wrought iron joists, per ton	112 00
Bar iron in lintels, per lb	0 06
" in chimney bars, per lb———	0 10
Wrought-iron staunchean bars	0 20
Yellow pine in lintels, per 1000 feet B.M.,	18 50
" in concealed roofs fixed, per 1000 feet, B.M.,	25 00
Lathed centering for windows and doors, &c., measuring soffit only, per foot super	0 20
" for arches in partition walls and passages, per foot super	0 12½
" for ducts and sewer, the whole length of arch, per foot super	0 05
Frames and sashes for basement windows, arched heads, fixed, per foot super	0 65
" " for basement double sashes, arched heads, fixed, per foot super	0 90
Oak sills to window casements, extra above, pine, per foot super	0 30

J. B.

EXHIBIT, No. 105.

ORIGINAL DRAFT—CONTRACT.

This indenture made this day of in the year 1859, between Ralph Jones, of the Town of Port Hope, in the County of Durham, Esquire, Edward Haycock of the same place Esquire, and Thomas C. Clarke of the same place Civil Engineer, carrying on business as Contractors for building under the firm of Jones, Haycock and Company, and hereinafter throughout designated as "The Contractors" of the first part, and Her Majesty Queen Victoria, as represented herein by the Honorable The Commissioner of Public Works of the Province of Canada, hereinafter throughout designated as "The Commissioner" of the second part.

Whereas, the Government of the Province of Canada have, in pursuance of an Act of Parliament of the said Province, and of certain resolutions to that effect of the Legislature of the said Province, determined to erect buildings at the City of Ottawa, hereinafter mentioned for the use occupation and accommodation of the Legislature, and of the several Public Departments of Her Majesty's Civil and Militia service of Canada. And, whereas,

for the purpose of carrying the same into effect, plans and specifications have been prepared for buildings for the use, occupation and accommodation of the Legislature of Canada, and of the officers and servants thereof, and which buildings are hereinafter throughout designated as The "Parliamentry Buildings" by Messrs. Fuller and Jones, the architects thereof, and as to the buildings for the use and accommodation of the several public Departments of Her Majesty's Civil and Militia Service of Canada, and of the officers and servants thereof, and which buildings are hereinafter throughout designated as the "Departmental Buildings," by Messrs. Stent and Laver the architects thereof. And this the Contractors both agreed to, and with Her Majesty the Queen, to erect, build and complete the several buildings, and to supply all proper and requisite materials therefor upon the terms, and subject to the conditions, stipulations and agreements hereinafter contained.

Now this Indice witnesseth that in consideration of the sum of $278,810 of lawful money of Canada, to be paid to the contractor, his executors, administrators and assigns, by Her Majesty, Her Heirs or Successors, in manner hereafter mentioned, he the contractor doth hereby for himself, his heirs, executors, administrators and assigns, covenant, promise and agree to and with Her Majesty the Queen, Her Heirs and successors in manner following, that is to say:—

1. He the contractor shall well and truly and faithfully build, erect, construct, complete and finish in the best and most workmanlike manner in every respect, and of the best materials of their several kinds, including the fire-proofing of the whole thereof, and to the satisfaction of the Commissioner, the Parliamentary buildings, and the Departmental buildings respectively to be built, erected, and placed in and upon such portion or portions of the land known as the Barrack Hill, in the City of Ottawa, as may be pointed out to the contractor for that purpose, and according to the plans and specifications thereof, respectively, and which plans and specifications as to the Parliamentary buildings are signed by Messrs. Fuller and Jones, the architects of the said buildings, and by the contractor; and the plans whereof so signed are deposited of record in the Department of Public Works, and the specifications whereof so signed are hereunto annexed, marked A, and which said papers A and B are to be construed; and as the Departmental Buildings are signed by Messrs. Stent and Laver, the architects of the said last mentioned buildings, and by the contractor, and the plans whereof so signed are deposited of record in the Department of Public Works, and the specifications whereof so signed are hereunto annexed, marked D, to be construed and read as part hereof and as if embodied in and forming part of this contract, and a specification of additional work to be done in making fire-proof the Departmental Buildings, also signed and hereunto annexed, marked D, and which said papers A and B are respectively also, and further that the contractors in the erection, construction and completion of the said Buildings, respectively, and in every matter or thing connected therewith, or incident or relative thereto, shall be guided and bound by such further working detailed plans and instructions as may from time to time be furnished and supplied to him by the architects in charge of each of the buildings respectively.

2. The contractor shall and will preparatory to or in course of erection of the works embraced in this contract make and complete all necessary excavations, and shall find and supply all necessary and proper scaffolding, materials, tools, implements, and plant of whatsoever kind or description for the erection, construction and completion of the said works and every part thereof, and shall also find and work and temporarily place such examples of the work, or moulds, or patterns thereof in experiment, to test the style or effect, and from time to time shall alter, vary or renew the same as the architects in charge or the Clerk of Works may require; and further, that all materials for the said work shall before being used be inspected and approved of by the architects in charge or by the Clerk of Works acting under their orders, and any materials disapproved of and rejected by the said architects or the Clerk of Works, shall not be used in the work, and if not removed by the contractor, when directed by the architects or Clerk of Works assigned, then the same shall be removed by the architects or Clerk of Works assigned to such place as they may deem proper at the cost, charge and risk of the contractor, but any such inspection and any approval of materials shall not in any wise subject or make liable Her Majesty to pay the contractor for the said materials so approved or any portion thereof, unless em-

ployed or used in the said works, nor prevent the rejection afterwards of any portion thereof which may prove or turn out at any time before the final completion of this contract to be unsound or unfit or improper to be used in the works, nor shall such inspection be considered as a waiver of objection to the work or any part thereof on the account of unsoundness or imperfection of the material used.

3. The Contractors shall forthwith immediately commence the works embraced in this contract, and shall proceed with the same from time to time, under the supervision, examination, and entire control of and at such rate of progress as in the opinion of the Commissioner or architects in charge of the same respectively may be requisite or proper, and the same buildings respectively, and every part and parcel thereof, shall be fully, thoroughly, and entirely completed in their several particulars, and given up under final certificate, and to the satisfaction in all respects of the Commissioner and of the architects in charge thereof respectively, as follows, that is to say: As to the Parliamentay buildings on or before the 1st day of February, which will be in the year 1862, and as to to the Departmental buildings on or before the first day of July, which will be in the said year 1862 time being of the essence of the contract, and further, that in failure of completion as aforesaid, of either of them, the Parliamentary buildings or the Departmental buildings at the period hereinbefore specially limited for the completion thereof, the Contractors shall forfeit all right, claim or demand to the sum of money or percentage hereinafter agreed to be retained by the Commissioners, and any and every part thereof, as also to any monies whatever, which may be at the time of the failure of the completion as aforesaid, due or owing to the Contractor, and that the Contractor shall also pay, or cause to be paid to Her Majesty, as liquidated damages, and not by way of fine or penalty, the sum of $200 for each and every week, and the fractional part of such sum for every part of a week for which the works within this contract or any portion thereof may remain incomplete, or for which the certificate of the Architects in charge of the said works respectively, of the completion of the said works or any part thereof may be withheld, and the Commissioner may deduct and retain in his hands such sums as may become due as liquidated damages, from any sum of money then due or payable, or to fall or become due or payable thereafter to the Contractor.

4. That in case of inclement weather occurring, whether during the progress of the works, which in the opinion of the Commissioners or Architects in charge of the same, respectively, may be detrimental thereto or during the period when the works may be suspended, in whole or in part, by the Commissioner or the Architects in charge of the said works, respectively, for the winter season or otherwise, such precautions shall be taken by the Contractor at his own outlay and cost, and without any charge or claim in respect thereof, as may in that view be directed by the Commissioner or Architects in charge, and that any such directions of the Commissioner or the Architects in charge shall not be taken or held in any manner, whatsoever, to involve Her Majesty in any responsibility in regard to the preservation of the work, and further, that if the Contractor fail in such precautions, the same may be adopted by the Commissioners or the Architects in charge, and the Commissioner may deduct and retain in his hands, out of the per centage herein mentioned or out of any monies which might otherwise at any time become or fall due to the Contractor, all such sums of money damages and expenses as shall have been incurred defrayed or expended in the adoption of such precaution as aforesaid.

5. That the contractor shall insure and keep insured until the completion and final certificate of the architects in charge of the completion of the entire works, in the office of one or more Fire Insurance Company or Companies which shall as to the reliability of such Company or Companies, be approved by the Commsssioner, the whole of the works herein contracted to be erected, and such of the materials as are of inflammable material, and may have been worked up ready for use, to an amount of at least 75 per cent. on the value of the same respectively as certified from time to time by the architects in charge, and shall also from time to time vary, change, or renew such amount, or office of insurance, and assign and transfer any policy or policies to Her Majesty, and deliver the instruments thereof to the Commissioner; and that in failure of the contractor at any time or times to insure the buildings and materials as aforesaid, or to vary, change, or renew the amount or office of insurance, or to assign, transfer and deliver the same as above mentioned, then and in every such case the Commissioner may insure or cause to be insured in the name of Her

Majesty, the said buildings and materials, as the case may be at a similar rate or value as hereinbefore mentioned, and may deduct and retain in his hands out of the per centage herein mentioned, or out of any monies which may otherwise at any time become or fall due to the contractor, all such sums of money and expenses as shall have been so incurred, defrayed or expended by the Commissioner for such purposes.

That if any change, alteration or addition, either in the position or details of the work embraced in this contract, or in any of the materials therefor shall be required by the Commissioner, the Contractors will make such change, alteration or addition, and if such change, alteration or addition shall entail extra expense on the contractor, either in labor or material, the same shall be allowed to the contractor; or, should it be saving to the contractor, in either labor or material, the same shall be deducted from the amount of this contract: But no such change, alteration, or addition, whatever may be the extent or quality thereof, or at whatever time the same may be required to be made, pending this contract, shall in any wise have the effect of suspending, superseding, annulling or rescinding this contract which shall continue to subsist, notwithstanding any such change, alteration or addition; and every such change, alteration or addition shall be performed and made by the contractor, under and subject to the conditions, stipulations and covenants herein expressed, as if such change, alteration or addition had been expressed and specified in the terms of this contract: but no change, alteration or addition as assigned whatever, and no extra work whatever shall be done without the written authority of the Commissioner, given prior to the execution of the work, nor will any allowance or payment whatever be made for the same in case it should be done without such authority.

6. On failure of the contractor to complete the works herein contracted for at the periods of time hereinbefore respectively mentioned, the contractor shall be liable for and shall pay or cause to be paid, to Her Majesty, all salaries or wages which shall become due to the Architects in charge, Clerk of Works, or subordinate person or persons superintending the work on behalf of the Commissioner, from the periods hereinbefore named for completion of the Works respectively up to and until the said works shall actually be completed and received; and the Commissioner may deduct and retain in his hands out of the per centage herein mentioned, or out of any monies which may otherwise at any time become or fall due to the contractor, all such sums of money, and expenses as shall have been so incurred, defrayed or expended by the Commissioner for such purpose, or the Commissioner may recover the same from the contractor in an action, in the name of Her Majesty, as monies paid for and on account of the contractor. The care of the works under this contract, and of every part thereof, and of the materials, tools, implements, and everything belonging or appertaining thereto, shall be entirely at the charge of the contractor, and he shall be liable and responsible for all loss, damage, detriment or injury that may arise or be sustained, during the progress of the works, and until the said buildings shall have been certified by the architects in charge as complete and have been delivered to and received by the Commissioner on the part of Her Majesty; and further, that in the event of any loss, damage, detriment or injury, the property so lost, damaged, deteriorated or injured, shall be replaced, reconstructed, restored, renewed, or amended, as the case may be, to the satisfaction of the Commissioner, or of the Architects in charge; and further, that if the Contractor fail in the replacing, reconstruction, restoration, renewal or amendment of such lost, damaged, deteriorated or injured property, the same may be so replaced, reconstructed, restored, renewed or amended by the Commissioner, and the Commissioner may deduct and retain in his hands, out of the per centage herein mentioned, or out of any monies which may otherwise at any time become or fall due to the Contractor, all such sums of money, and expenses as shall have been so incurred, defrayed or expended by the Commissioner for such purpose or the Commissioner may recover the same from the Contractor, as in the next succeeding clause mentioned, used in connection with or reference to Parliamentary buildings, mean Messrs. Fuller & Jones, Architects, of the City of Ottawa, or such other person or persons as may be appointed by the Commissioner to act as architects in the room and stead of the said Messrs. Fuller & Jones.

7. The words "Architects in charge" shall mean Messrs. Stent and Laver of the city of Ottawa, Architects, or such other person or persons as may be appointed by the

Commissioner to act as architects in the room and stead of the said Messrs. Stent and Laver.

8. The construction of the words given in this clause shall not control any more extended construction which may be given any of such words throughout this contract. If it shall at any time appear to the Commissioner that the establishment, or the rate of progress at in and upon the said works, or any of them or of any work or matter incident to the same, or in any way connected therewith are not satisfactory or such as to ensure the completion of the same respectively within the time hereinbefore mentioned, or on failure or breach by the Contractor of any matter or thing herein contained on the part of the Contractor to be done or performed, or if the contractor shall at any time or times neglect or refuse to carry on this contract or any part of it, or to supply requisite and proper scaffoldings, tools, implements or plant, or materials, or is unable to carry on the same, then and in any of such cases the Commissioner may forthwith, after having given three days notice to the contractor of his intention so to do, and without any process or suit at law, or other legal proceeding of any kind whatever, or withoutits being necessary to place the contractor *en demeure*, either absolutely take the works or any part thereof out of the hands of the contractor and relet the same without the necessity of previous advertisement, or employ additional workmen, and provide materials, tools, implements, and all other things requisite for the completion and performance of the contract at the expense of the contractor shall in either case be liable for all damages and extra costs and expenditure which may be incurred by reason thereof; and if such damages, extra costs and expenditure exceed in the whole the said sum of $278,810, then Her Majesty may recover of and from the contractor the balance or excess over and beyond the said sum of $278,810.

9. If any overseer, mechanic or workman employed on or about the works, or any portion be incompetent to perform the work or duties required of him, or give just cause of complaint, the contractor shall immediately, upon the application of the Architect or Clerk of Works, dismiss such person or persons forthwith from the works, and he shall not be employed again thereon without the written consent of the Architect or Clerk of Works, and should the Contracter continue to employ such overseer mechanic or workman, the contractor shall pay to Her Majesty, Her Heirs and Successors, the sum of $20 as liquidated damages and not of fine or penalty, for each and every day during which such overseer mechanic or workman shall be employed on the works after such application for his dismissal as aforesaid, and the Commissioner shall have the same power of retaining such sums as may become due to Her Majesty under this clause, or of enforcing payment thereof as are given and expressed in the seventh clause of this contract.

10. That whenever and so often as it may be necessary for the contractor to co-operate with any person contracting for supplying or placing the apparatus for heating the Buildings, the contractor shall diligently and under the directions of the architects in charge or the Clerk of Works, perform all such work as shall be requisite or proper on the part of the contractor for building in, securing and placing in proper position the flues or other apparatus required for heating, in a proper and secure mode, and to prevent the possibility of accident by fire therefrom, without any extra charge therefor, and shall be bound in all things to conform to the direction of the Commissioner, touching such work.

11. That when any discrepancy exists between the dimensions as indicated by the scale of any drawing and the dimensions marked in figures on the plans or on any drawings which may be from time to time supplied by the architects to the contractors for the purpose of working therefrom, the figures are in all cases to be considered correct; and if there should be any discrepancy between the figures or dimensions or the form of the constructions or the material as indicated by the plans or drawings, and the dimensions and descriptions given in the specifications, the directions of the Commissioner or the architect in charge shall be adopted in reference to such discrepancy, and shall be binding and conclusive on the contractor.

12. And in all cases of defective description or delineation in either the plans, drawings, or the specifications, the explanation given by the Commissioner or the Architects in charge shall be received, and shall be final and binding on the Contractor, and that whenever neither the plans, drawings, nor the specifications contain any

notice of minor parts, the intention to include which is nevertheles in the opinion of the Commissioners or of the architects in charge clearly to be inferred, and which minor and detail parts are common, usual and proper on workmanship of a similar character, and which are obviously necessary to the due completion or stability of the work; all such parts and the necessary materials therefor, or the necessary tools and implements for working up the same are to be found completed, provided and fixed by the contractor, and are to be considered as included in this contract and not as extra work, it being the intention of this covenant that all such work of every kind as may be necessary for completely finishing the works proposed, in the best and most workmanlike manner, and for the rectification of any failure from whatever cause arising, and the well maintaining, sustaining and supporting the whole of the works, as well as any and whatever change, alteration and addition that may be made thereon, so that the whole may remain sound and firm as implied in the plans, specifications and drawings, heretofore mentioned, although the same are not therein specificially expressed, and that in case of any difference of opinion as to anything arising under this clause in reference to any person than the Commissioner, will be allowed or admitted, and the decision of the Commissioner thereon shall be binding and conclusive on the Contractor.

13. That in case any difference of opinion shall at any time arise as to the construction to be put upon any part of the specifications hereunto annexed, or of the plans or of the drawings to be from time to time furnished by the Architects in charge, to the Contractor, or as to the construction of this Deed of Covenant, or any part of it, or as to the duties, obligations, contract, and agreements of the Contractor, or of Her Majesty thereunder, the same and every difference of opinion of what nature or kind soever, and how often soever, the same may arise or occur, or be reported or renewed, shall be determined by the Commissioner alone, without the possibility of any interference of any person or persons soever, and without any objection, on the part of the Contractor, to such a course, and any or every determination of the Commissioner, on any such difference of opinion as heretofore mentioned, or as may by possibility arise within this Contract, shall be final and conclusive, and binding upon the Contractor without any appeal therefrom whatsoever.

14. That the Contractor shall not in any way directly or indirectly sell, dispose of relet, assign, transfer or sublet to any person or persons whomsoever, either entirely or partially and jointly with himself or in any other manner or way howsoever this contract, or any part thereof, or any portion of the work embraced herein, or to be performed hereunder, or which without being distinctly and specially mentioned herein may yet be rendered necessary for the full and proper completion of the contract.

15. That any notice or other paper connected with this contract which may be required or desirable on the part of Her Majesty, may be served on the Contractor either at his or their usual domicile, or at his or their usual place of business at the city of Ottawa, by being left at the Post Office, and any notice or other paper so addressed and left at the Post Office, shall to all intents and purposes be considered legally served.

And the Contractor and Her Majesty the Queen do, and each of them doth hereby further mutually covenant promise and agree the one with the other of them, the contractor for himself his heirs and executors, administrators and assignees; and Her Majesty for herself, her heirs and successors in manner following, that is to say:

1. That payment of any sum of money which may be made to the Commissioner by Her Majesty under this contract will be so made according to the provisions of the Act of Parliament of this Province passed in the 2nd Session of the 22nd Vic. chap. 3, section 18, and within ten days after an estimate of the architects in charge shall have been received by the Commissioner specifying the amount of work done according to the terms and conditions of their contract during the month then ending, but nevertheless the Commissioner on behalf of Her Majesty shall withhold from the contractors and retain ten per cent out of the amount of the estimates until the perfect completion and acceptance by the Commissioner of the work, which ten per cent so withheld and retained, shall be paid with the last instalment within ten days after the architect in charge shall have delivered to the Commissioner his final estimate of the work performed and the materials furnished, in virtue of this contract, with detailed measurements, weights and other quantities, and his or their certificate of the work having been fully completed and finished if the Commissionor shall

so soon have accepted and approved of the work; and that in forming his final estimate, the architects in charge shall not be bound or governed by the preceding monthly estimates, which shall be considered and taken as merely approximate. And it is expressly declared that the monthly payments to be made to the contractor as hereinbefore mentioned, shall be made upon the basis of the schedule of prices hereunto annexed, marked C, to be nevertheless regulated, determined and applied in all cases whatever by the Commissioner or the architects in charge, and upon none other basis or scale; and further, that the presentation of the monthly estsmate of the architect in charge shall not of itself entitle the contractor to demand payment of the amount to be paid as hereinbefore mentioned.

2. That it shall be in the power of the Commissioner on behalf of Her Majesty, to make payments or advances on materials, implements, vessels, or tools of any description procured for the works, or used, or intended to be used about the same, in such cases, and upon such terms and conditions as the said Commissioner may seem proper, and that whenever any advance or payment shall be made to the Contractor upon any tools, implements, or materials of any description, the tools, implements, or materials upon which such advance or payments shall be made shall thenceforward be vested in and held as collateral security by Her Majesty, Her Heirs and Successors, for the due fulfilment by the Contractor of the present contract, it being however well understood that all such tools, implements, or materials of any kind, are to remain at the risk of the Contractor who shall be responsible for the same, until finally used and accepted as part of the work by the Commissioner, but the Contractor shall not exercise any act of ownership or control whatever over any tools, implements, or materials upon which any advance or payment has been so made without the permission in writing of the Commissioner. See Exhibit, No. —, McGreevy's objections.

3. That should the amount now or at any time hereafter to be voted for the purposes contemplated by the 2nd section of the Act of this Province, 20th Vict. c. 17, be at any time expended previous to the completion of the work, now contracted for; the Contractor may or not, as he may see fiit on receiving a notice in writing from the Commissioner to the above effect, stop the work, but in any case, the Contractor shall not be entitled to any further payment for work done after the service of the notice above referred to, until the necessary funds have been voted by the Legislature, nor shall the Contractor have any claim for compensation or damages for the said suspension of payment.

In this contract, the words "Her Majesty" or "Her Majesty the Queen" shall mean Her Majesty, Her Heirs, and successors.

The words "The Commissioner" shall mean the Commissioner of Public Works of the Province of Canada for the time being.

The words "The Contractor" shall mean the hereinbefore mentioned Ralph Jones, Edward Haycock, Thomas McGreevy, and Thomas C. Clarke, carrying on business as contractors for building, under the firm of Jones, Haycock & Company, and heirs, executors, administrators and assignees of them, and each and every of them generally and severally.

☞ See Exhibit No. 41, McGreevy's objections.

EXHIBIT, No. 106.

LIST OF SEVERAL LEADING CONTRACTS MADE BY DEPT. OF PUBLIC WORKS.

Laberge & Co., Contractors.

1. Montreal Court House,

Dated 28th Nov., 1850, and 7th March, 1851.

No schedule attached to this contract, but one was afterwards adopted and acted on during the progress of the work.

The Contractor was requested to furnish a detailed estimate with his tender, and his price to be taken for contract and extra work as progress estimates.

2. Montreal Post Office, Contracted for by Trades.

Dated 5th May, 1853.

No schedule attached to this contract.

3. Hamilton Post Office, Sharp & Heuston.

Dated 28th June, 1854.

No schedule. 7th printed clause provided for the extra work.

4. Old Government House, Toronto. Wm. Henry Pim

Dated 19th June, 1855.

No schedule attached to contract; but rates and prices submitted with tender, and acted on in the settlement.

5. Mechanics' Institute, Toronto, Wm. Henry Pim.

Dated 26th June, 1852.

A schedule attached, and work to be paid for at the rates and prices of it.

6. Kingston Custom House. T. C. Pigeon.

Dated 3rd October, 1856.

No schedule attached to contract. 7th clause printed, provided for extra work; but schedule was submitted with tender and adopted for progress estimates and final settlement. Case referred to arbitration.

7. Kingston Post Office, Overend & Matthews.

Dated 3rd of October, 1856.

No schedule attached. 7th printed clause provided for extra work.

8. London Post Office, William Elliott.

Dated 14th August, 1858.

No schedule attached to contract. 7th printed clause as usual; but specification called for schedule, and one was made by architects in charge, on which progress estimates were given.

9. Hamilton Custom House, George Morrison.

Dated 10th September, 1858

No schedule attached to contract. 7th printed clause provides for extra work. Rates and prices were submitted with tender.

10. Quebec Post Office and Parliament Buildings. Elliott & Mellville.

Dated June, 1859.

No schedule attached to contract. 7th printed clause provided for extra work. A schedule was submitted with the tender, and acted on in the final settlement.

11. Court Houses and Jails, L. C., Sinclair & Skelsey.

Dated 11th January, 1859.

No schedule attached to contract; and the 7th printed clause, as usual, provides for the extra work.

12. Quebec New Jail, Murphy & Quigley.

Dated 31st January, 1861.

Two schedules attached to this contract; *one* for the contract, and the *other* for the extra work. In this case the 7th clause is modified so as to give the contractor the benefit of the 2nd schedule (which is at a higher rate than the first) for all additions; and in case of deductions, the prices of the first or lesser schedule are to govern. The work is now in progress, and estimates are made in this manner.

EXHIBIT, No. 107.

(Copy of No. 48,766.)

QUEBEC, 15th August, 1860.

SIR,—In reply to your letter of the 8th June last, having reference to the substitution of sandstone for limestone for the facing of the Parliamentary buildings at Ottawa, and allowing twenty-one cents per foot superficial, additional, for the same, I beg to inform you that I agree to the change and accept the price mentioned in yours, viz., twenty-one cents per foot superficial. But if, in future, the Government would consult the Contractor before determining the price on so important a change, it would be much more satisfactory, as the price on the present occasion is not remunerative to the Contractor.

I have, &c.,

THOS. R. MCGREEVY,
Contractor, Parliament Buildings, Ottawa.

To T. TRUDEAU, Esq.,
Secretary Public Works, Quebec.

ERRATA.

Page 30—In Ottawa and Kingston Toise, "62 feet" should be "72 feet."

Page 123—Schedule G. signature, foot of page, "Thomas Gundey," should be "Thomas Gundry."

PRINTED BY HUNTER, ROSE & CO., QUEBEC.